

JVC

SERVICE MANUAL

STEREO INTEGRATED AMPLIFIER

MODEL A-X500VB



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Safety Precautions

1. The design of this product contains special hardware, many circuits and components specially for safety purposes.
For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the parts list in Service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list in Service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and/or the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard.
When service is required, the original lead routing and dress should be observed, and they should be confirmed to be returned to normal, after reassembling.

5. Leakage current check

(Safety for electrical shock hazard)

After reassembling the product, always perform an isolation check on the exposed metal parts of the Products (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).

● Alternate check method.

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1500 Ω 10W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.).

This corresponds to 0.5 mA AC (r.m.s.).

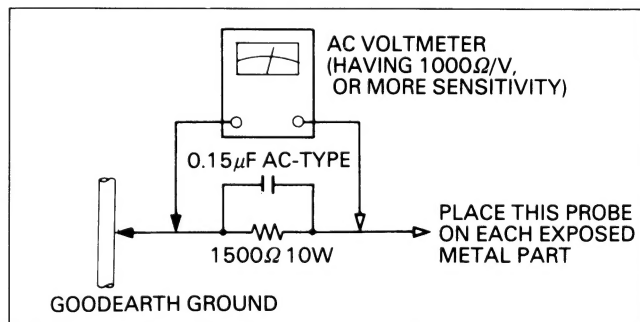


Fig. 1

Service Precautions

1. Before repairing, be sure to discharge electric capacitors across a resistor of about 100 ohms/1 watt.
2. When the display microprocessor (IC951) is replaced, apply silicone grease (G746 Shin-Etsu Chemical Co., Ltd.) to the pins to prevent malfunction due to rapid temperature change.
If the silicone grease is not available, consult your nearest JVC dealer.

1. Specifications

CIRCUITRY

Preamplifier : ICL, high gain phono equalizer for MM/MC cartridge

Power Amplifier : "Dynamic Super-A high-gain" power amplifier

OVERALL CAHRACTERISTICS

Output power : **100 watts per channel, min. RMS, both channels driven, into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007% total harmonic distortion.**
105 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.002% total harmonic distortion. (measured by JVC Audio Analyzer System)
110 watts per channel into 8 ohms at 1 kHz, 0.7% total harmonic distortion.

Total harmonic distortion : 0.007% (20 Hz – 20kHz, 8 ohms) at 100 watts

PHONO IN → SP. OUT : 0.01% (20 Hz – 20 kHz, 8 ohms) at 100 watts

Intermodulation distortion : 0.005 % (60 Hz: 7 kHz = 4: 1, 8 ohms) at 100 watts

Power band width : 5 Hz – 40 kHz (IHF, 0.05 %, 8 ohms both channels driven)

Frequency response : 3 Hz – 100 kHz +0, –3 dB (8 ohms)

Damping factor : 75 (1 kHz, 8 ohms)

Input terminals

Input sensitivity/ impedance (1 kHz)

PHONO (MM) : 2.5 mV/47 kohms

PHONO (MC) : 200 μ V/100 ohms

DAD/TUNER/ : 200 mV/40 kohms

VIDEO-1,2/VTR/
TAPE-1,2

Signal-to-noise ratio '66 IHF DIN

PHONO (MM) : 85 dB 66 dB

PHONO (MC) : 65 dB 66 dB

DAD/TUNER/ : 100 dB 67 dB

VIDEO-1,2/VTR/
TAPE-1,2 ('66 IHF)

PHONO (MM) : 83 dB (Rec out)

PHONO (MC) : 75 dB (Rec out)

DAD/TUNER/ : 77 dB (Speaker out)

VIDEO-1,2/VTR/
TAPE-1,2 ('78 IHF)

Tone controls : S.E.A. center frequencies 63, 160, 400, 1 k, 2.5 k, 6.3 k, 16 kHz S.E.A. control range \pm 12 dB

Loudness control at : 100 Hz: +6 dB,
volume –30 dB 10 kHz: +4 dB,

EQUALIZER

PHONO overload capacity

PHONO (MM) : 120 mV (0.03 % THD)

PHONO (MC) : 10 mV (0.03 % THD)

PHONO RIAA deviation

PHONO (MM) : \pm 0.3 dB (20 Hz – 20 kHz)

PHONO (MC) : \pm 0.5 dB (20 Hz – 20 kHz)

Recording output

Output level/impedance

TAPE REC-1,2 : 200 mV/660 ohms (PHONO)

VIDEO

Signal Allowable : 1.2 Vp-p

Input (VIDEO-1/
VIDEO-2/VTR IN)

Output Signal level : 1 Vp-p (at 1 Vp-p input)

(MONITOR OUT) VTR

REC

Impedance : 75 ohms unbalanced

S/N : 45 dB

Crosstalk : 45 dB (3.58 MHz)

GENERAL

Dimensions : 435 (W) \times 117 (H) \times 380 (D)
mm (17-1/8" \times 4-5/8" \times 15")

Weight : 8.5 kg (18.7 lbs.)

POWER SPECIFICATIONS

Countries	Line Voltage & Frequency	Power Consumption
U. S. A.	AC 120 V \sim , 60 Hz	400 watts/520 VA
Canada		
Continental Europe	AC 220 V \sim , 50 Hz	250 watts
U. K.	AC 240 V \sim , 50 Hz	250 watts
Australia		
Other Areas	AC 110/120/220/240 V \sim Selectable, 50/60 Hz	250 watts

2. Removal and Reassembly Procedures

2-(1) Metal Cover Section

1. Remove 6 screws securing the metal cover.
(4 on each side of the cover and 2 on the rear).
2. Pull out the metal cover backwards.

2-(2) Front Panel Section

1. Pull out the plastic rivet bushes by pressing it from the bottom plate.
2. Remove 3 screws from the bottom plate.

2-(3) FL Escutcheon Section

1. Remove screw (1) from the switch P.C. Board.
2. Remove the P.C. board by sliding it in the direction of the arrow.
3. Disengage 2 claws located at the bottom of the escutcheon from the front bracket.

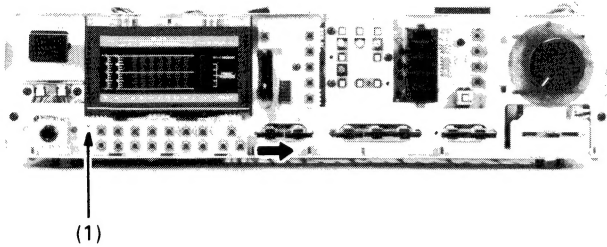


Fig. 2

4. Disengage 2 claws located at the top of the escutcheon and remove the escutcheon.

Note: To protect lamp ass'y, remove the ass'y before these procedures.

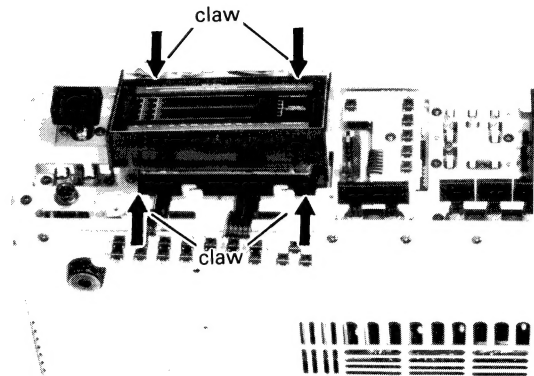


Fig. 3

2-(4) Display P.C. Board Ass'y

1. Remove 3 screws, as shown in Fig. 4.
2. Remove 2 retaining screws (A) from the slide variable resistor.

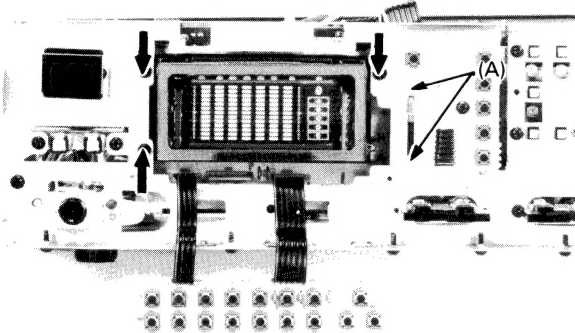


Fig. 4

3. Pull out the slide knob.
4. Pull out the display P.C. board ass'y upward while shifting it inward, as shown in Fig. 5.

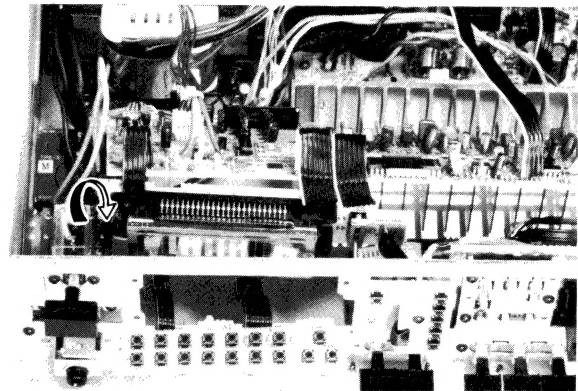


Fig. 5

2-(5) Power Transistor Section

1. Remove the metal cover. (It is not necessary to remove the front panel.)
2. Remove 4 screws from each power amp. P.C. board bracket.
3. Pull out the power amp P.C. board in the direction of the arrow while shifting it to the front panel, as shown in Fig. 6.

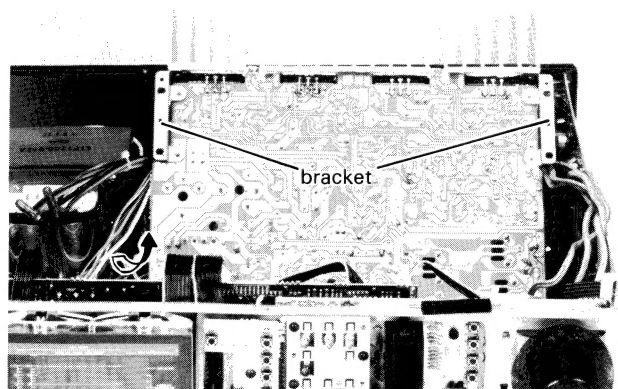
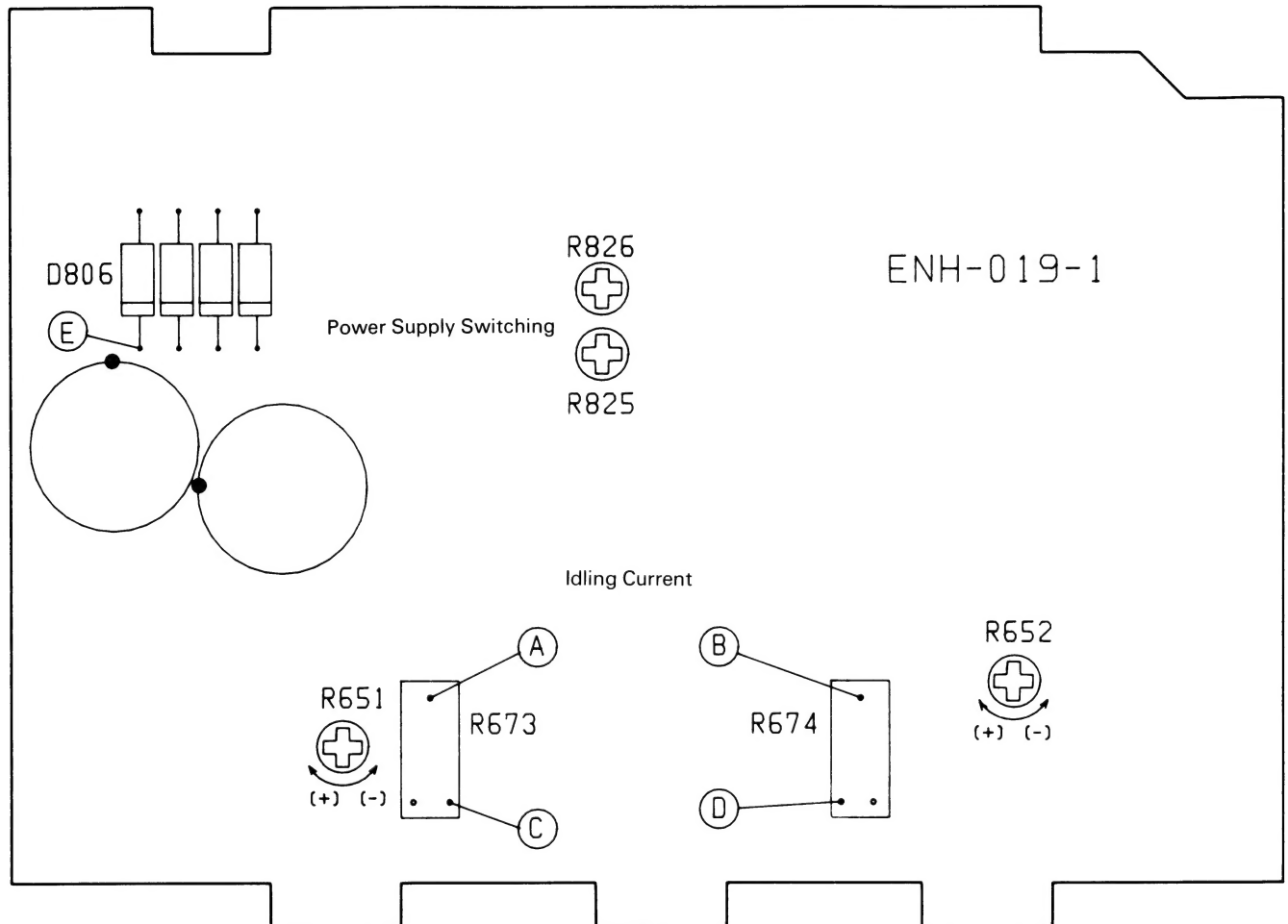


Fig. 6

3. Adjustment Procedures



■ Idling current adjustment

- Before turning the power ON, turn the semi-fixed resistors (R651 for Left channel and R652 for Right channel) of the power amplifier circuit board fully counterclockwise.
- Turn the power ON and then adjust the semi-fixed resistors (R651 and R652) so that the voltage at the following test points of the power amplifier circuit board is within a range of the 9 mV ~ 13 mV.
 "L" channel: measure the voltage between test point R673 (A) and test point R673 (C) (ground).
 "R" channel: measure the voltage between test point R674 (B) and test point R674 (D) (ground).
- Readjust resistors R651 and R652 about 5 minutes after the power is turned on (the heat-sink temperature must be sufficiently high) so that the voltage at the test points becomes 11 mV. Confirm that the voltage does not vary when the heat-sink temperature increase further.

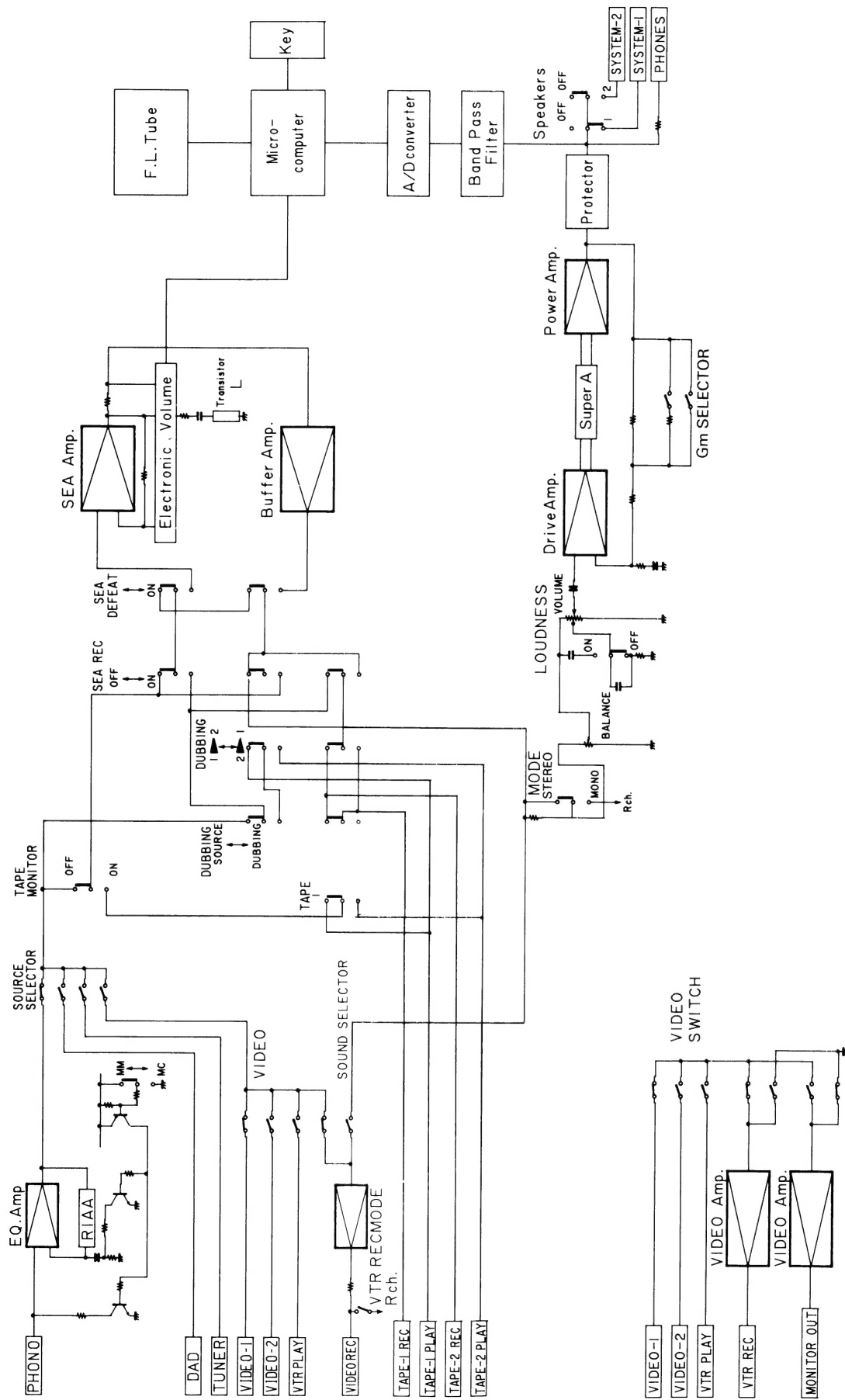
Note: Be sure to perform the measurement with the probes and cabinet of the measuring equipment separated from the grounding terminals of A-X500VB or of other measuring equipment.

■ Power supply switching circuit adjustment

- Before turning the power ON, turn the semi-fixed resistors (R825 for Left channel and R826 for Right channel) of the amplifier circuit board fully counterclockwise.
- Turn the power ON and input a 20 Hz sine wave to the Left channel (or the Right channel) of the DAD. Then, connect a 7 Ω dummy load to the speaker terminal, adjust either the amplifier's volume or the oscillator's volume to obtain 29V output.
- Measure voltage on the D806 cathode (E) and confirm that the range of "50V \pm 3V" exists. Next, slowly rotate clockwise the semi-fixed resistors (R825/L or R826/R) and set voltage at the D806 cathode (E) to the level of 38V \pm 3V.
- Shift the dummy load from 7 ohms to 8 ohms and confirm that voltage at the D806 cathode (E) is 50V \pm 3V. When this voltage is out of the range (50V \pm 3V), readjust the semi-fixed resistors.

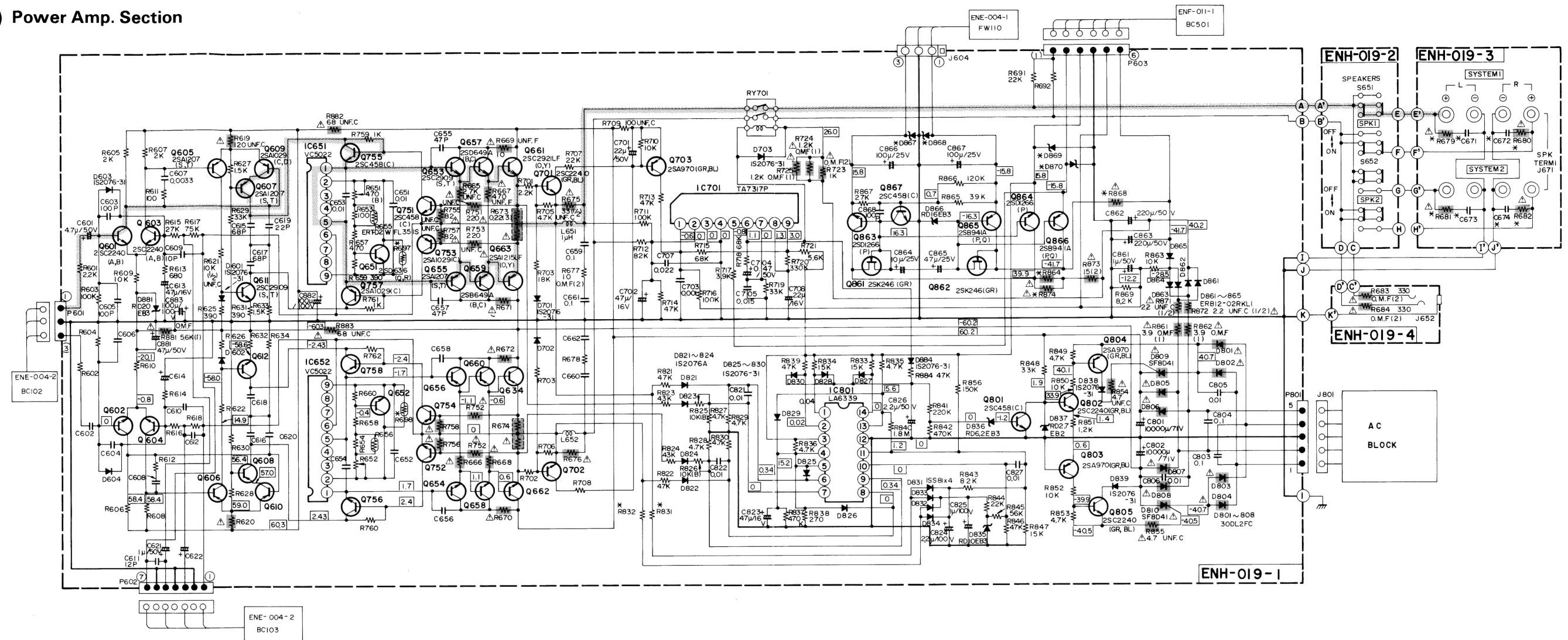
Note: Adjust on one channel at a time, either on the "L" channel or the "R" channel.
 When you need dummy (7 ohms/8 ohms), consult with JVC.

4. Block Diagram



5. A-X500VB Schematic Diagram

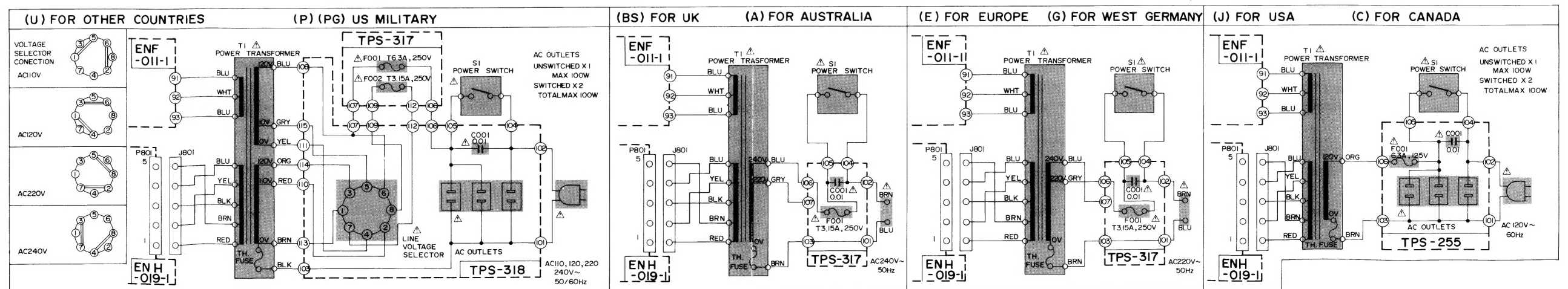
5-(1) Power Amp. Section



	POWER AMP ASS'Y	SEA & FL ASS'Y	SWITCH ASS'Y	EQ. & IN/OUT ASS'Y	PRIMARY ASS'Y
J . C	ENH-019A	ENF-011A	ENC-007B	ENE-004A	TPS-255H
U, P, PG	ENH-019C	ENF-011B		ENE-004B	TPS-317A & TPS-318B
E . A					TPS-317L
BS					TPS-317MBS
G	ENH-019B			ENE-004C	TPS-317L

NO	R678 ~ 682	C671 ~ 674	R664	R674	R668	D677 ~ 670	R697, 698	R831, 832
J . C	NONE	NONE	3.3 UNF.C	NONE	15 UNF.C	NONE	NONE	330 UNF.C
U, P, PG	NONE	NONE	12 UNF.F	12 UNF.F	15 UNF.F	ROIBEB3	ERT-02VHL	3.3K
E . A, G, BS	NONE	NONE	12 UNF.F	12 UNF.F	15 UNF.F	ROIBEB3	202S	330 UNF.C
G	10 UNF.C	0.01	12 UNF.F	12 UNF.F	15 UNF.F	ROIBEB3		

1. indicates signal path.
2. When replacing the parts in the darkened area and those marked with Δ , be sure to use the designated parts to ensure safety.
3. This is the standard circuit diagram.
The design and contents are subject to change without notice.



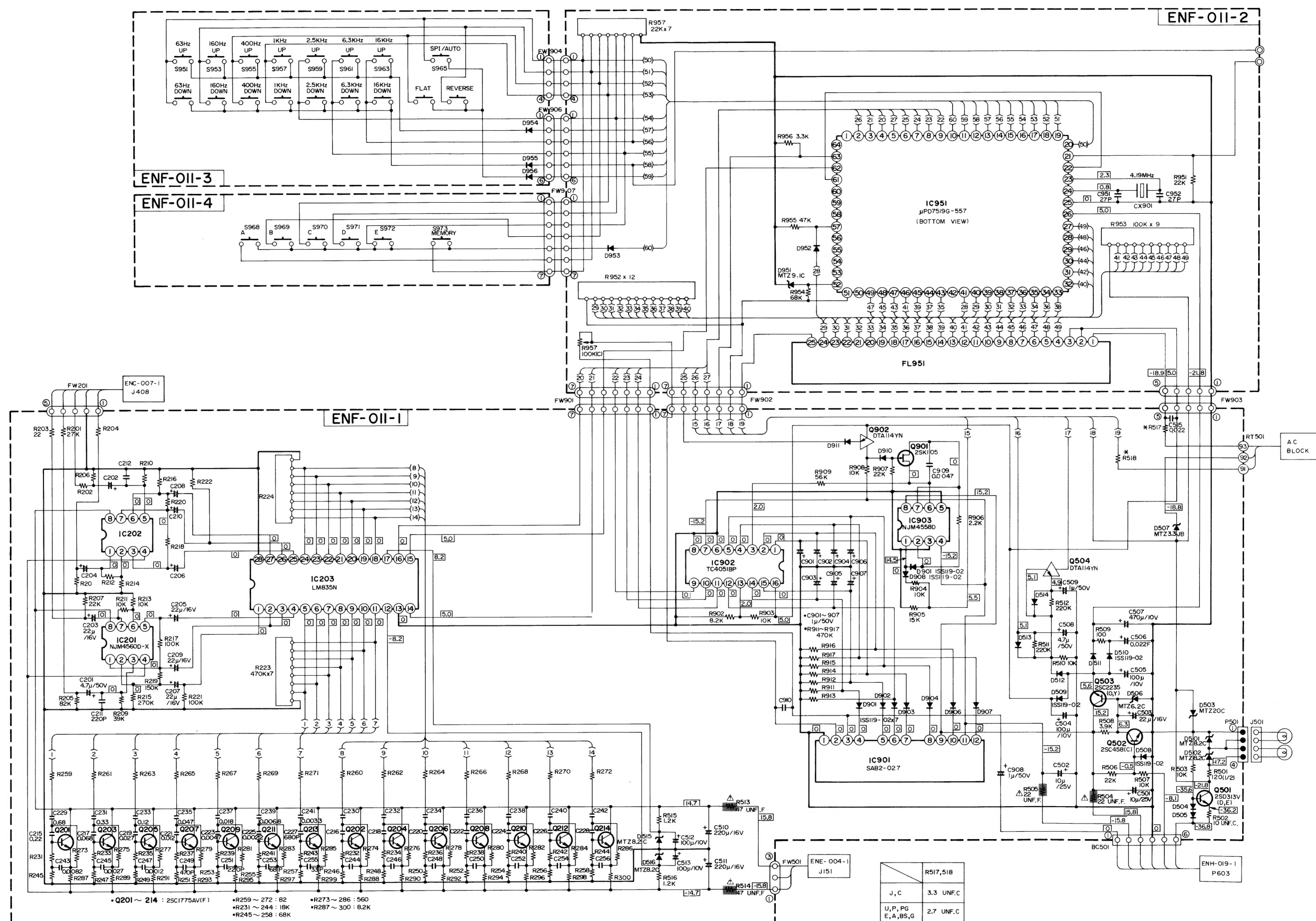
The schematic diagram illustrates the internal circuitry of a VCR, organized into several functional blocks:

- ENE-004-1:** Includes the video input section with VIDEO 1 and VIDEO 2 inputs, and the REC (Record) and PLAY controls.
- ENE-004-2:** Contains the video processing section, featuring IC155 (TC9151P) and IC156 (M5218P).
- ENE-004-3:** Shows the video output section, including the MONITOR OUT and VTR (Video Tape Recorder) controls.
- ENE-004-4:** Details the video output stage, including the TAPE MONITOR and VOLUME controls.
- ENE-004-5:** Contains the video output stage, including the TAPE MONITOR and VOLUME controls.
- ENF-011-1:** Shows the video output stage, including the TAPE MONITOR and VOLUME controls.
- ENC-007-1:** Contains the video output stage, including the TAPE MONITOR and VOLUME controls.
- ENH-019-1:** Shows the video output stage, including the TAPE MONITOR and VOLUME controls.

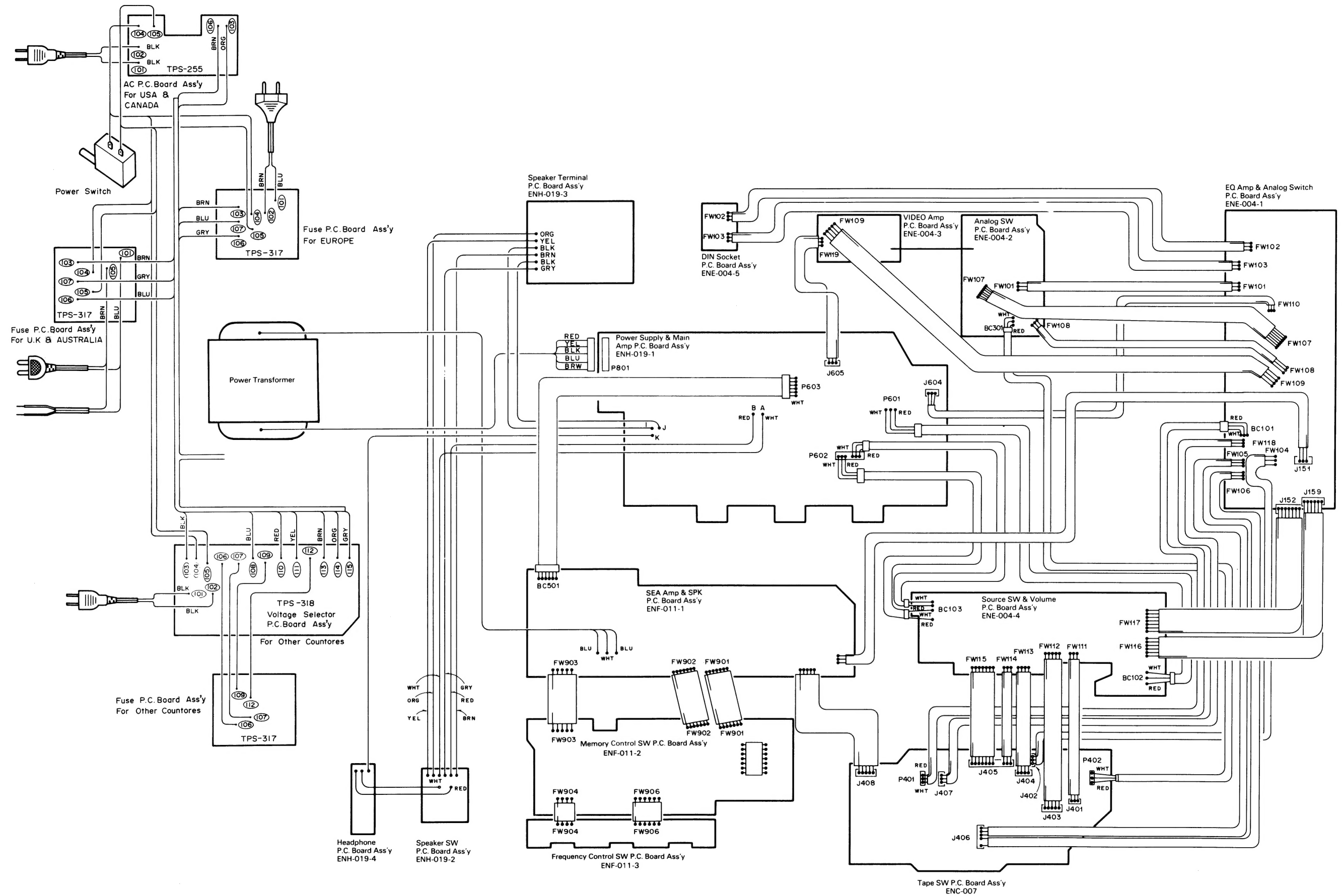
The diagram also includes a component list table at the bottom left:

J109	R191	C105	R137	L101	C127	C171	C175
J, C	NONE	NONE	47P	SHORT	NONE	NONE	NONE
U, P, PG, E, A, BS	USED	100K	47P	SHORT	NONE	NONE	NONE
G	USED	100K	820P	1.5K	150uH	100P	220P

5-(3) S.E.A. & Display Section



6. Wiring Diagram



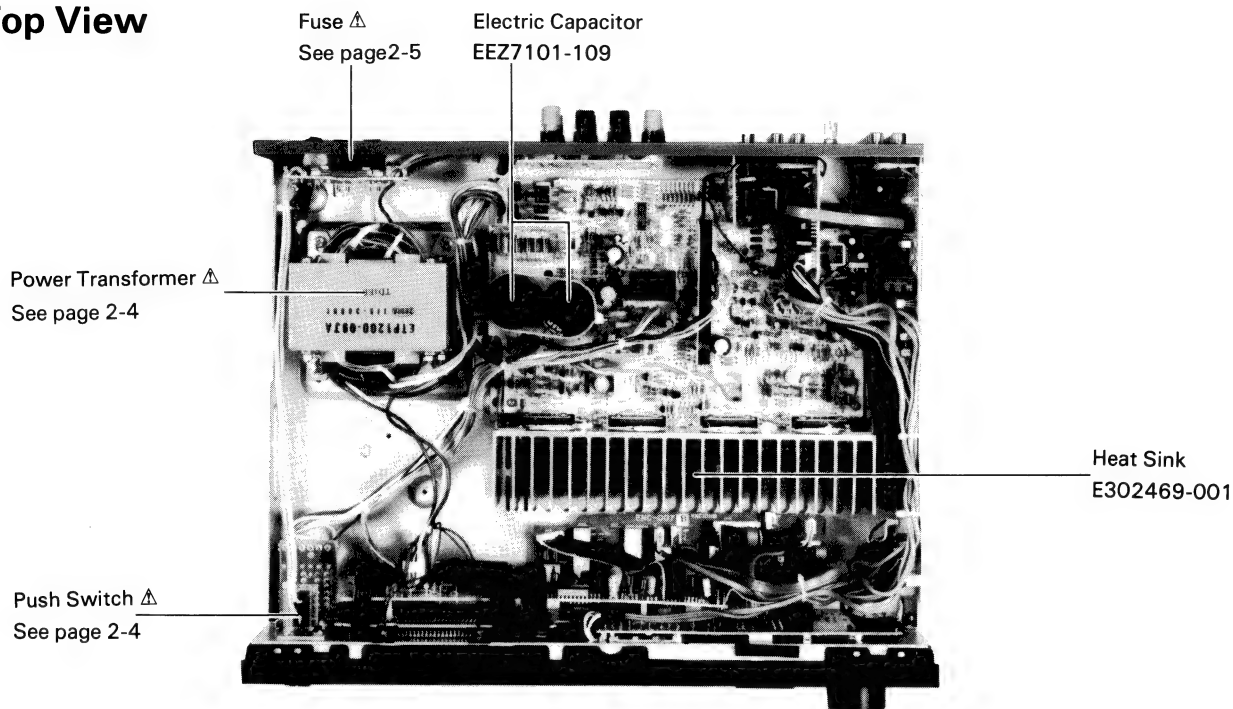
PARTS LIST

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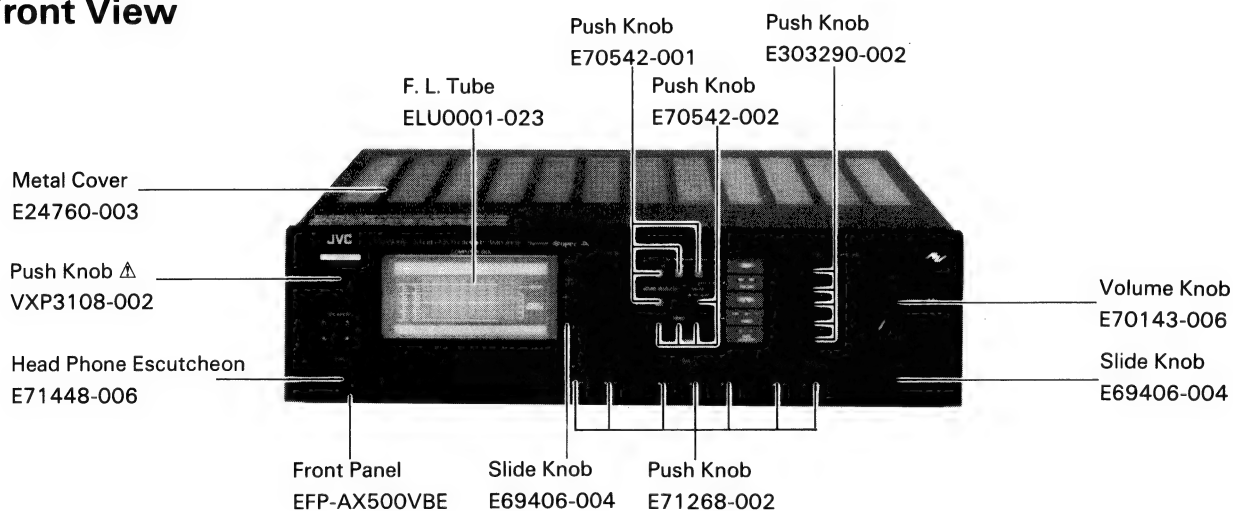
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1. Main Parts Locations

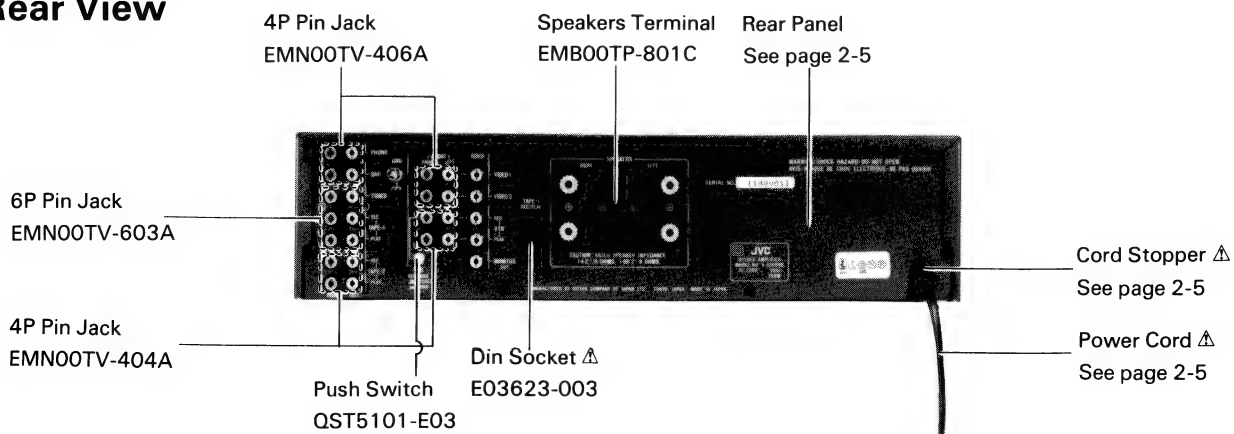
1-(1) Top View



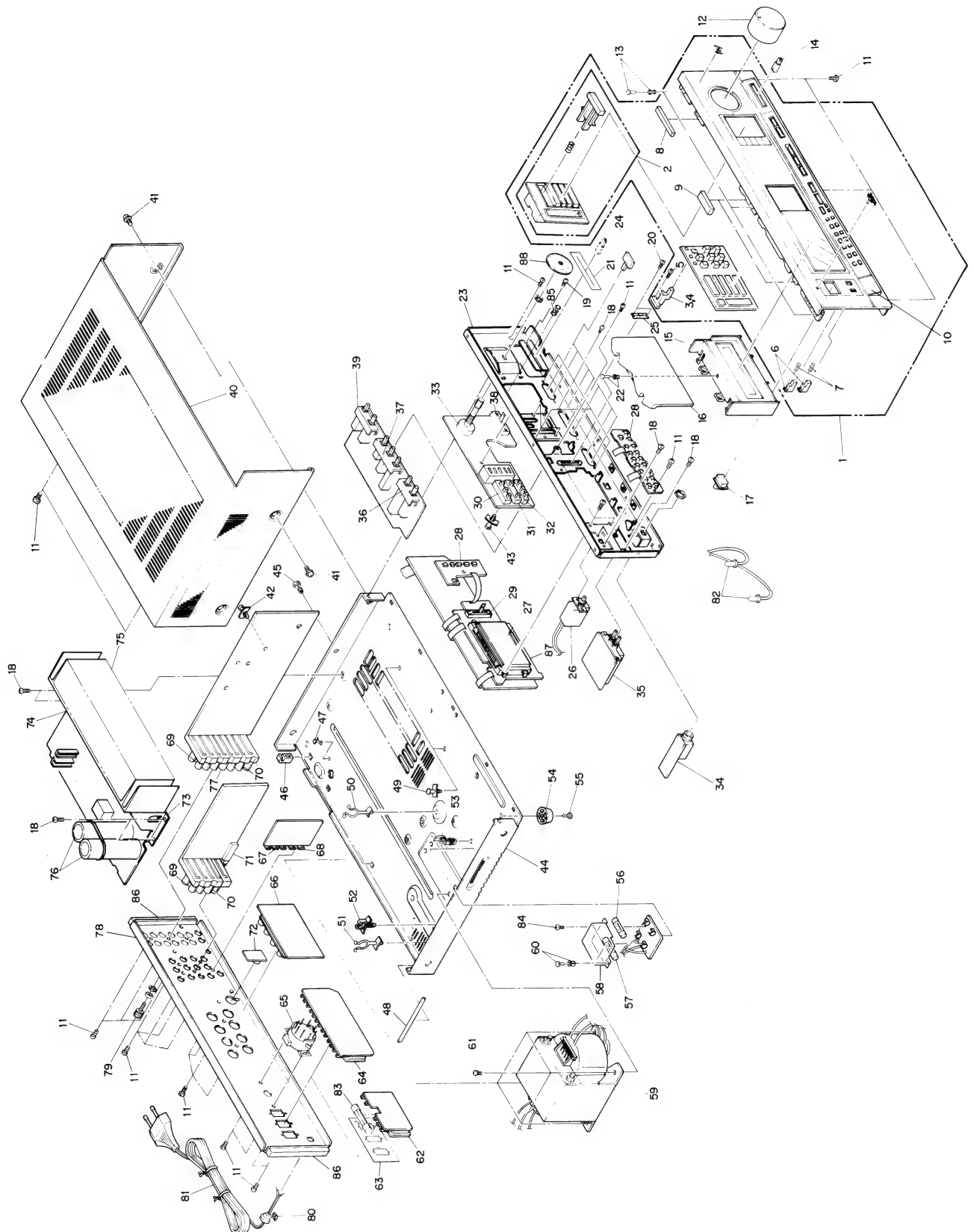
1-(2) Front View



1-(3) Rear View



2. Exploded View and Part Numbers List



△	No.	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-RX500VB	Front Panel Ass'y	1		
	2	E303453-001	Push Knob Ass'y	1		
	3	E70542-001	Push Knob	4	Gm SELECTOR	
	4	E70542-002	Push Knob	4	Gm SELECTOR	
	5	E65185-031	Spring	8		
	6	E70543-001	Push Knob	2	SPEAKERS	
	7	E65185-032	Spring	2	SPEAKERS	
	8	EX00080007N50S	Felt Spacer	1		
	9	EX00060007N40S	Felt Spacer	2		
	10	E71448-006	Head Phone Escutcheon	1		
	11	SBSB3008M	Tapping Screw	27		
	12	E70143-006	Volume Knob	1	Volume	
	13	E48729-009	Plastic Rivet	1		
	14	E69406-004	Balance Knob	1		
	15	E303303-003	FL Escutcheon	1		
	16	E303305-003	Scale	1		
	17	VXP3108-002	Push Knob	1	POWER	
	18	E65119-004	Screw	16		
	19	E67298-001	Screw	2		
	20	E70053-001	Screw	2		
	21	E71454-001	Felt Spacer	2	BALANCE	
	22	E48729-007	Plastic Rivet	1		
	23	E11015-001	Front Bracket	1		
	24	E71268-002	Push Knob	1		
	25	E72023-001	Felt Spacer	1	DISPLAY LEVEL	
	26	QSP1106-005	Power Switch	1	POWER	J, C, P, PG, E, A, G, U, BS
	27	QSP1106-005BS	Power Switch	1	POWER	
	28	ELU0001-023	F.L. Tube	1		
	29	ESP0001-007	Push Switch	27		
	30	QST0331-E01	Push Switch	1	Gm SELECTOR	
	31	QST0331-E02	Push Switch	1	MM/MC, SOUND SELECTOR	
	32	QST0331-E03	Push Switch	1	VTR, VIDEO	
	33	QVN9A3B-5F5V	Variable Resistor	1	Main VOLUME	
	34	QMS6302-128	Head Phone Jack	1	PHONES	
	35	QST4241-E07	Push Switch	1	SPEAKERS	
	36	QST4261-E04	Push Switch	1	SEA, SEAREC	
	37	QST4361-E04	Push Switch	1	TAPE DUBBING, TAPE	
	38	QVTC16M-1F5	Variable Resistor	1	BALANCE	
	39	QST4261-E08	Push Switch	1	MODE, LOUDNESS	
	40	E24760-003	Metal Cover	1		
	41	E61660-004	Special Screw	1	METAL COVER	
	42	E69384-002	Fastener	1		
	43	E71904-001	Fastener	1		
	44	E11016-003	Chassis Base	1		
	45	E303216-001	Fastener	1		
	46	E300021-001	Fastener	2		
	47	E71873-001	Fastener	1		
	48	E65778-007	Spacer	1		
	49	E71344-001	Fastener	2		
	50	QHW1115-001	Wire Clamp	1		J, C, P, PG, U E, A, G, BS P, PG, E, A, G, BS, U
	51	QHW2052-001	Wire Clamp	1		
	52	QHW4110-001	Wire Clamp	1		
	53	E34455-001	Fastener	4		
	54	E47227-012	Foot	4		
	55	SBSB3010M	Screw	4		P, PG, U E, A, G BS
	56	QMF51A2-6R3S	FUSE	1		
		QMF51A2-3R15S	FUSE	1		
		QMF51A2-3R15BS	FUSE	1		
	57	QMF51A2-3R15S	FUSE	1		

△ : Safety Parts

△	No.	Part Number	Part Name	Q'ty	Description	Areas
△	58	E303419-001	Protector	1		
△	59	ETP1200-09JA	Power Transformer	1		J, C
△		ETP1200-09FA	Power Transformer	1		P, PG, U
△		ETP1200-09EA	Power Transformer	1		E, A, G
△		ETP1200-09EABS	Power Transformer	1		BS
	60	E48729-008	Plastic Rivet	1		E, A, G, BS
	61	E65389-002	Screw	4		
△	62	QMC0637-004	AC. Socket	1		J, C
	63	E69589-001	Spacer	1		J, C
△	64	QMC0637-004	AC Outlet	1		P, PG, U
△	65	QSR0085-006U	Voltage Selector	1		P, PG, U
	66	EMB00TP-801C	Speakers Terminal	1		
	67	EMN00YV-302A	3P Pin Jack	1		
	68	EMN00YV-201A	Pin Jack	1		
	69	EMN00TV-406A	4P Pin Jack	2	VIDEO 1/2, PHONO, DAD	
	70	EMN00TV-404A	4P Pin Jack	2	VTR, TAPE-2, VTR, PLAY	
	71	QST5101-E03	Push Switch	1	VTR	
	72	E03623-003	Din Socket	1		P, PG, E, A, G, U
	73	E300107-003	C.B. Holder	1		
	74	E300107-004	C.B. Holder	1		
	75	E302469-001	Heat Sink	1		
	76	EEZ7101-109	Electric Capacitor	2		
	77	EMN00TV-603A	6P Pin Jack	1	Tape-1. Tuner	
	78	E24789-001	Rear Panel	1		J, C
		E24789-002	Rear Panel	1		E, A, G, BS
		E24789-003	Rear Panel	1		P, PG, U
△	79	E70078-001	GND Terminal	1		
△	80	QHS3876-162	Cord Stopper	1		J, C, P, PG, E, A, G, U
△		QHS3876-162BS	Cord Stopper	1		BS
△	81	QMP1200-200	Power Cord	1		J
△		QMP1900-200	Power Cord	1		C
△		QMP3900-200	Power Cord	1		P, PG, U
△		QMP2560-244	Power Cord	1		E, G
△		QMP7600-200	Power Cord	1		A
△		QMP9017-008BS	Power Cord	1		BS
	82	E03872-020	Lamp Ass'y	2		
	83	QMF61U1-5R0	Fuse	1		J, C
	84	E65119-001	Screw			
	85	E48729-008	Plastic Rivet	1		
	86	EXO085010R10S	Felt Spacer	2		
	87	EXO040003N20S	Felt Spacer	1		
	88	E69559-006	Spacer	1		

△ : Safety Parts

3. Printed Circuit Board Ass'y and Parts List

3-(1) ENH-019 □ Power Amp P. C. Board Ass'y

Note: ENH-019 □ varies according to the areas employed. See note (1) when placing an order.

Note (1)

Designated Areas	P.C. Board Ass'y
U.S.A., Canada	ENH-019 A
West Germany	ENH-019 B
Europe, Australia U.S. Military Market U.K., Other Countries	ENH-019 C

Note (2)

The symbols (赤 , 黒 , 白 ...etc) on P.C. Board surface are factory process only.

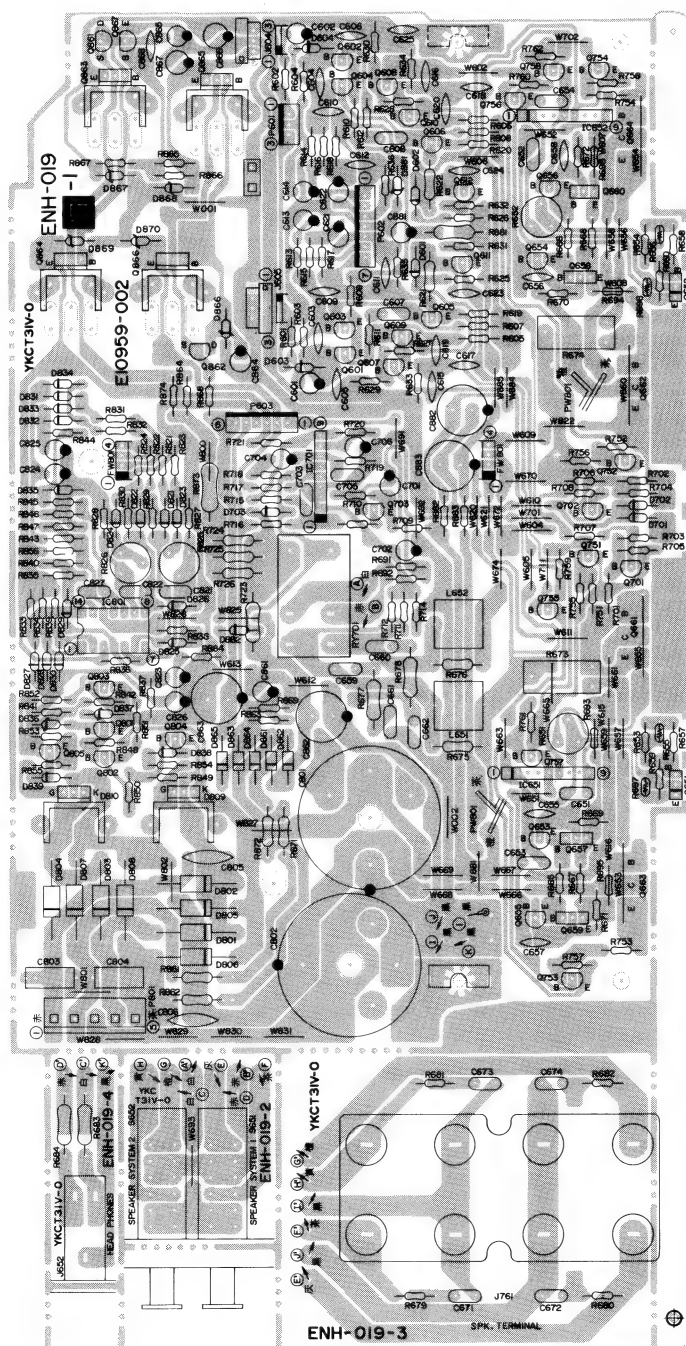


Fig. 2

Each Individual P.C. Board Location

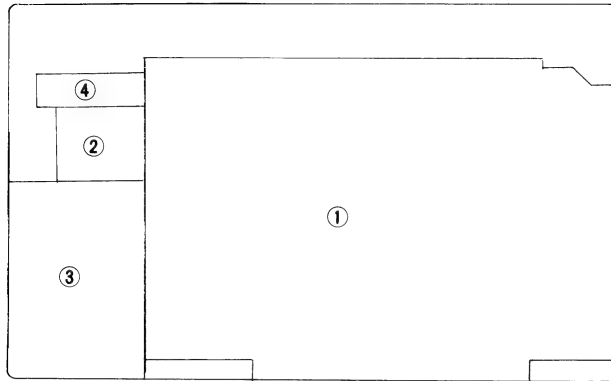


Fig. 3

Transistors

⚠	Item No.	Part Number	Description	Areas
			Maker	
	Q601	2SC2240(A, B)	Silicon	Toshiba
	Q602	2SC2240(A, B)	Silicon	Toshiba
	Q603	2SC2240(A, B)	Silicon	Toshiba
	Q604	2SC2240(A, B)	Silicon	Toshiba
	Q605	2SA1207(S, T)	Silicon	Sanyo
	Q606	2SA1207(S, T)	Silicon	Sanyo
	Q607	2SA1207(S, T)	Silicon	Sanyo
	Q608	2SA1207(S, T)	Silicon	Sanyo
	Q609	2SA1029(C, D)	Silicon	Hitachi
	Q610	2SA1029(C, D)	Silicon	Hitachi
	Q611	2SC2909(S, T)	Silicon	Sanyo
	Q612	2SC2909(S, T)	Silicon	Sanyo
	Q651	2SD636(Q, R)	Silicon	Matsushita
	Q652	2SD636(Q, R)	Silicon	Matsushita
	Q653	2SC2909(S, T)	Silicon	Sanyo
	Q654	2SC2909(S, T)	Silicon	Sanyo
	Q655	2SC1207(S, T)	Silicon	Sanyo
	Q656	2SC1207(S, T)	Silicon	Sanyo
	Q657	2SD669A(B, C)	Silicon	Hitachi
	Q658	2SD669A(B, C)	Silicon	Hitachi
	Q659	2SB649A(B, C)	Silicon	Hitachi
	Q660	2SB649A(B, C)	Silicon	Hitachi
	Q661	2SC2921LF(O, Y)	Silicon	Sanken
	Q662	2SC2921LF(O, Y)	Silicon	Sanken
	Q663	2SA1215LF(O, Y)	Silicon	Sanken
	Q664	2SA1215LF(O, Y)	Silicon	Sanken
	Q701	2SC2240(GR, BL)	Silicon	Toshiba
	Q702	2SC2240(GR, BL)	Silicon	Toshiba
	Q703	2SA970(GR, BL)	Silicon	Toshiba
	Q751	2SC458(C)	Silicon	Hitachi
	Q752	2SC458(C)	Silicon	Hitachi
	Q753	2SA1029(C)	Silicon	Hitachi
	Q754	2SA1029(C)	Silicon	Hitachi
	Q755	2SC458(C)	Silicon	Hitachi
	Q756	2SC458(C)	Silicon	Hitachi

- ① Power Supply and Preamplifier P. C. Board Ass'y
- ② Speaker Switch P. C. Board Ass'y
- ③ Speaker Terminals P. C. Board Ass'y
- ④ Headphone P. C. Board Ass'y

Transistors

⚠	Item No.	Part Number	Description	Areas
			Maker	
	Q757	2SA1029(C)	Silicon	Hitachi
	Q758	2SA1029(C)	Silicon	Hitachi
	Q801	2SC458(C)	Silicon	Hitachi
	Q802	2SC2240(GR, BL)	Silicon	Toshiba
	Q803	2SA970(GR, BL)	Silicon	Toshiba
	Q804	2SA970(GR, BL)	Silicon	Toshiba
	Q805	2SC2240(GR, BL)	Silicon	Toshiba
	Q861	2SK246(GR)	F.E.T.	Toshiba
	Q862	2SK246(GR)	F.E.T.	Toshiba
	Q863	2SD1266(P)	Silicon	Matsushita
	Q864	2SD1266(P)	Silicon	Matsushita
	Q865	2SB941A(P, Q)	Silicon	Matsushita
	Q866	2SB941A(P, Q)	Silicon	Matsushita
	Q867	2SC458(C)	Silicon	Hitachi

I.C.s

⚠	Item No.	Part Number	Description	Areas
			Maker	
	IC651	VC5022(X, Y)	I.C.	Rohm
	IC652	VC5022(X, Y)	I.C.	Rohm
	IC701	TA7317P	I.C.	Toshiba
	IC801	LA6339	I.C.	Sanyo

Capacitors

⚠	Item No.	Part Number	Description	Areas
	C601	QETB1HM-475	4.7 μ F 50V	Electro
	C602	QETB1HM-475	4.7 μ F 50V	Electro
	C603	QCS31HJ-101	100PF 50V	Ceramic
	C604	QCS31HJ-101	100PF 50V	Ceramic
	C605	QCS31HJ-101	100PF 50V	Ceramic
	C606	QCS31HJ-101	100PF 50V	Ceramic
	C607	QFN31HK-332	3300PF 50V	Mylar
	C608	QFN31HK-332	3300PF 50V	Mylar
	C609	QCS31HJ-100	10PF 50V	Ceramic
	C610	QCS31HJ-100	10PF 50V	Ceramic
	C611	QCS31HJ-120	12PF 50V	Ceramic
	C612	QCS31HJ-120	12PF 50V	Ceramic
	C613	QET61CM-476	47 μ F 16V	Electro
	C614	QET61CM-476	47 μ F 16V	Electro
	C615	QCS31HJ-680	68PF 50V	Ceramic
	C616	QCS31HJ-680	68PF 50V	Ceramic
	C617	QCS31HJ-680	68PF 50V	Ceramic
	C618	QCS31HJ-680	68PF 50V	Ceramic
	C619	QCS31HJ-220	22PF 50V	Ceramic
	C620	QCS31HJ-220	22PF 50V	Ceramic

⚠ : Safety Parts

Capacitors

△	Item No.	Part Number	Description			Areas
	C621	QETC1HM-105	1 μ F	50V	Electro	
	C622	QETC1HM-105	1 μ F	50V	Electro	
	C651	QFN31HK-103	0.01 μ F	50V	Mylar	
	C652	QFN31HK-103	0.01 μ F	50V	Mylar	
	C653	QFN31HK-103	0.01 μ F	50V	Mylar	
	C654	QFN31HK-103	0.01 μ F	50V	Mylar	
	C655	QCS31HJ-470	47PF	50V	Ceramic	
	C656	QCS31HJ-470	47PF	50V	Ceramic	
	C657	QCS31HJ-220	22PF	50V	Ceramic	
	C658	QCS31HJ-220	22PF	50V	Ceramic	
	C659	QFN81HK-104	0.1 μ F	50V	Mylar	
	C660	QFN81HK-104	0.1 μ F	50V	Mylar	
	C661	QFN81HK-104	0.1 μ F	50V	Mylar	
	C662	QFN81HK-104	0.1 μ F	50V	Mylar	
	C671	QFN31HK-103	0.01 μ F	50V	Mylar	B
	C672	QFN31HK-103	0.01 μ F	50V	Mylar	B
	C673	QFN31HK-103	0.01 μ F	50V	Mylar	B
	C674	QFN31HK-103	0.01 μ F	50V	Mylar	B
	C701	QETC1HM-226	22 μ F	50V	Ceramic	
	C702	QETC1CM-476	47 μ F	16V	Electro	
	C703	QFN31HK-102	1000PF	50V	Mylar	
	C704	QETC1HM-474	0.47 μ F	50V	Ceramic	
	C705	QFN31HK-153	0.015 μ F	50V	Mylar	
	C706	QET61CM-226	22 μ F	16V	Electro	
	C801	EEZ7101-109	1000 μ F	71V	Electro	
	C802	EEZ7101-109	1000 μ F	71V	Electro	
△	C803	QFZ0075-104H	0.1 μ F	400V	M. Mylar	
△	C804	QFZ0075-104H	0.1 μ F	400V	M. Mylar	
△	C805	QCE22HP-103	0.01 μ F	500V	Ceramic	
△	C806	QCE22HP-103	0.01 μ F	500V	Ceramic	
	C821	QFN31HK-103	0.01 μ F	50V	Mylar	
	C822	QFN31HK-103	0.01 μ F	50V	Mylar	
	C823	QETC1CM-476	47 μ F	16V	Electro	
	C824	QETC2AM-225	2.2 μ	100V	Electro	
	C825	QETC2AM-105	1 μ F	100V	Electro	
	C826	QETC1HM-225	2.2 μ F	50V	Electro	
	C827	QFN31HK-103	0.01 μ F	50V	Mylar	
	C861	QETC1HM-105	1 μ F	16V	Electro	
	C862	QETB1HM-477	470 μ F	50V	Electro	
	C863	QETB1HM-227	220 μ F	50V	Electro	
	C864	QETC1EM-476	47 μ F	25V	Electro	
	C865	QETC1EM-476	47 μ F	25V	Electro	
	C866	QETC1EM-107	100 μ F	25V	Electro	
	C867	QETC1EM-107	100 μ F	25V	Electro	
	C868	QCS31HJ-101	100PF	50V	Ceramic	
	C881	QETC1HM-476	47 μ F	50V	Electro	
	C882	QETB2AM-107	100 μ F	100V	Electro	
	C883	QETB2AM-107	100 μ F	100V	Electro	

Diodes

△	Item No.	Part Number	Description			Areas
					Maker	
	D701	1S2076-31	Silicon		Hitachi	
	D702	1S2076-31	Silicon		Hitachi	
	D703	1S2076-31	Silicon		Hitachi	
△	D801	30DL2FC	Silicon		Nippon Inter	
△	D802	30DL2FC	Silicon		Nippon Inter	
△	D803	30DL2FC	Silicon		Nippon Inter	
△	D804	30DL2FC	Silicon		Nippon Inter	
△	D805	30DL2FC	Silicon		Nippon Inter	
△	D806	30DL2FC	Silicon		Nippon Inter	
△	D807	30DL2FC	Silicon		Nippon Inter	
△	D808	30DL2FC	Silicon		Nippon Inter	
△	D809	SF8D41			Toshiba	
△	D810	SF8D41			Toshiba	
△	D821	1S2076A	Silicon		Hitachi	
	D822	1S2076A	Silicon		Hitachi	
	D823	1S2076A	Silicon		Hitachi	
	D824	1S2076A	Silicon		Hitachi	
	D825	1S2076-31	Silicon		Hitachi	
	D826	1S2076-31	Silicon		Hitachi	
	D827	1S2076-31	Silicon		Hitachi	
	D828	1S2076-31	Silicon		Hitachi	
	D829	1S2076-31	Silicon		Hitachi	
	D830	1S2076-31	Silicon		Hitachi	
	D831	1SS81	Silicon		Hitachi	
	D832	1SS81	Silicon		Hitachi	
	D833	1SS81	Silicon		Hitachi	
	D834	1SS81	Silicon		Hitachi	
	D835	RD10EB3	Zener		NEC	
	D836	RD6.2EB3	Zener		NEC	
	D837	RD2.7EB2	Zener		NEC	
	D838	1S2076-31	Silicon		Hitachi	
	D839	1S2076-31	Silicon		Hitachi	
	D861	ERB12-02RKL1	Silicon		Fujidenki	
	D862	ERB12-02RKL1	Silicon		Fujidenki	
	D863	ERB12-02RKL1	Silicon		Fujidenki	
	D864	ERB12-02RKL1	Silicon		Fujidenki	
	D865	ERB12-02RKL1	Silicon		Fujidenki	
	D866	RD16EB3	Zener		NEC	
	D867	RD18EB3	Zener		NEC	B
	D867	RD18EB3	Zener		NEC	C
	D868	RD18EB3	Zener		NEC	B
	D868	RD18EB3	Zener		NEC	C
	D869	RD18EB3	Zener		NEC	B
	D869	RD18EB3	Zener		NEC	C
	D870	RD18EB3	Zener		NEC	B
	D870	RD18EB3	Zener		NEC	C
	D881	RD20EB3	Zener		NEC	
	D882	1S2076-31	Silicon		Hitachi	

Diodes

△	Item No.	Part Number	Description			Areas
					Maker	
	D601	1S2076-31	Silicon		Hitachi	
	D602	1S2076-31	Silicon		Hitachi	
	D603	1S2076-31	Silicon		Hitachi	
	D604	1S2076-31	Silicon		Hitachi	

Resistors

△	Item No.	Part Number	Description			Areas
	R601	QRD141J-222S	2.2K	1/4W	Carbon	
	R602	QRD141J-222S	2.2K	1/4W	Carbon	
	R603	QRD141J-104S	110K	1/4W	Carbon	
	R604	QRD141J-104S	110K	1/4W	Carbon	
	R605	QRD141J-202S	2K	1/4W	Carbon	

△: Safety Parts

Resistors

△	Item No.	Part Number	Description			Areas
	R606	QRD141J-202S	2K	1/4W	Carbon	
	R607	QRD141J-202S	2K	1/4W	Carbon	
	R608	QRD141J-202S	2K	1/4W	Carbon	
	R609	QRD141J-103S	10K	1/4W	Carbon	
	R610	QRD141J-103S	10K	1/4W	Carbon	
	R611	QRD141J-101S	100	1/4W	Carbon	
	R612	QRD141J-101S	100	1/4W	Carbon	
△	R613	QRD145J-681S	680	1/4W	U.N.F. Carbon	
△	R614	QRD145J-681S	680	1/4W	U.N.F. Carbon	
	R615	QRD141J-273S	27K	1/4W	Carbon	
	R616	QRD141J-273S	27K	1/4W	Carbon	
	R617	QRD141J-753S	75K	1/4W	Carbon	
	R618	QRD141J-391S	75K	1/4W	Carbon	
△	R619	QRD145J-121S	120	1/4W	U.N.F. Carbon	
△	R620	QRD145J-121S	120	1/4W	U.N.F. Carbon	
△	R621	QRD125J-103	10K	1/4W	U.N.F. Carbon	
△	R622	QRD125J-103	10K	1/4W	U.N.F. Carbon	
	R625	QRD141J-391S	39	1/4W	Carbon	
	R626	QRD141J-391S	39	1/4W	Carbon	
	R627	QRD141J-152S	1.5K	1/4W	Carbon	
	R628	QRD141J-152S	1.5K	1/4W	Carbon	
	R629	QRD141J-333S	33K	1/4W	Carbon	
	R630	QRD141J-333S	33K	1/4W	Carbon	
	R631	QRD141J-391S	390	1/4W	Carbon	
	R632	QRD141J-391S	390	1/4W	Carbon	
	R633	QRD141J-152S	1.5K	1/4W	Carbon	
	R634	QRD141J-152S	1.5K	1/4W	Carbon	
	R651	QVP4A0B-471	470	1/4W	Variable	
	R652	QVP4A0B-471	470	1/4W	Variable	
	R653	QRD141J-101S	100	1/4W	Carbon	
	R654	QRD141J-101S	100	1/4W	Carbon	
	R655	ERT-D2WFL351S			Thermistor	
	R656	ERT-D2WFL351S			Thermistor	
	R657	QRD141J-471S	470	1/4W	Carbon	
	R658	QRD141J-471S	470	1/4W	Carbon	
	R659	QRD141J-391S	390	1/4W	Carbon	
	R660	QRD141J-391S	390	1/4W	Carbon	
	R665	QRD145J-272S	2.7K	1/4W	U.N.F. Carbon	
	R666	QRD145J-272S	2.7K	1/4W	U.N.F. Carbon	
△	R667	QRZ0062-471	470	1/4W	Fusible	
△	R668	QRZ0062-471	470	1/4W	Fusible	
△	R669	QRZ0062-100	10	1/4W	Fusible	
△	R670	QRZ0062-100	10	1/4W	Fusible	
△	R671	QRZ0062-100	10	1/4W	Fusible	
△	R672	QRZ0062-100	10	1/4W	Fusible	
△	R673	ERF032K-R22	0.22	3W	Cement	
△	R674	ERF032K-R22	0.22	3W	Cement	
△	R675	QRD125J-330	33	1/2W	U.N.F. Carbon	
△	R676	QRD125J-330	33	1/2W	U.N.F. Carbon	
△	R677	QRG022J-100A	10	2W	O.M. Film	
△	R678	QRG022J-100A	10	2W	O.M. Film	
△	R679	QRD145J-100S	10	1/4W	U.N.F. Carbon	
△	R680	QRD145J-100S	10	1/4W	U.N.F. Carbon	
△	R681	QRD145J-100S	10	1/4W	U.N.F. Carbon	
△	R682	QRD145J-100S	10	1/4W	U.N.F. Carbon	
△	R683	QRG022J-331A	330	3W	O.M. Film	
△	R684	QRG022J-331A	330	3W	O.M. Film	
	R691	QRD141J-223S	22K	1/4W	Carbon	
	R692	QRD141J-223S	22K	1/4W	Carbon	
	R701	QRD141J-222S	2.2K	1/4W	Carbon	

Resistors

△	Item No.	Part Number	Description			Areas
	R702	QRD141J-222S	2.2K	1/4W	Carbon	
	R703	QRD141J-183S	18K	1/4W	Carbon	
	R704	QRD141J-183S	18K	1/4W	Carbon	
	R705	QRD141J-472S	4.7K	1/4W	Carbon	
	R706	QRD141J-472S	4.7K	1/4W	Carbon	
	R707	QRD141J-223S	22K	1/4W	Carbon	
	R708	QRD141J-223S	22K	1/4W	Carbon	
	R709	QRD145J-101S	100	1/4W	Carbon	
	R710	QRD141J-103S	10K	1/4W	Carbon	
	R711	QRD141J-104S	110K	1/4W	Carbon	
	R712	QRD141J-823S	82K	1/4W	Carbon	
	R713	QRD141J-473S	47K	1/4W	Carbon	
	R714	QRD141J-473S	47K	1/4W	Carbon	
	R715	QRD141J-683S	68K	1/4W	Carbon	
	R716	QRD141J-104S	110K	1/4W	Carbon	
	R717	QRD141J-392S	3.9K	1/4W	Carbon	
	R718	QRD141J-683S	68K	1/4W	Carbon	
	R719	QRD141J-333S	33K	1/4W	Carbon	
	R720	QRD141J-334S	330K	1/4W	Carbon	
	R721	QRD141J-562S	5.6K	1/4W	Carbon	
△	R723	QRG022J-102S	1K	2W	O.M. Film	
△	R724	QRG012J-122A	1.2K	2W	O.M. Film	
△	R725	QRG012J-122A	1.2K	1W	O.M. Film	
	R751	QRD145J-221S	220	1/4W	Carbon	
	R752	QRD145J-221S	220	1/4W	Carbon	
	R753	QRD145J-221S	220	1/4W	Carbon	
	R754	QRD145J-221S	220	1/4W	Carbon	
△	R755	QRD145J-820S	82	1/4W	U.N.F. Carbon	
△	R756	QRD145J-820S	82	1/4W	U.N.F. Carbon	
△	R757	QRD145J-820S	82	1/4W	U.N.F. Carbon	
△	R758	QRD145J-820S	82	1/4W	U.N.F. Carbon	
	R759	QRD141J-102S	1K	1/4W	Carbon	
	R760	QRD141J-102S	1K	1/4W	Carbon	
	R761	QRD141J-102S	1K	1/4W	Carbon	
	R762	QRD141J-102S	1K	1/4W	Carbon	
	R821	QRD141J-473S	47K	1/4W	Carbon	
	R822	QRD141J-473S	47K	1/4W	Carbon	
	R823	QRD141J-433S	43K	1/4W	Carbon	
	R824	QRD141J-433S	43K	1/4W	Carbon	
	R825	QVP4A0B-103	10K	0.1W	Variable	
	R826	QVP4A0B-103	10K	0.1W	Variable	
	R827	QRD141J-472S	4.7K	1/4W	Carbon	
	R828	QRD141J-472S	4.7K	1/4W	Carbon	
	R829	QRD141J-472S	4.7K	1/4W	Carbon	
	R830	QRD141J-472S	4.7K	1/4W	Carbon	
△	R831	QRD145J-331S	330	1/4W	U.N.F. Carbon	
△	R832	QRD145J-331S	330	1/4W	U.N.F. Carbon	
	R833	QRD141J-153S	15K	1/4W	Carbon	
	R834	QRD141J-153S	15K	1/4W	Carbon	
	R835	QRD141J-472S	4.7K	1/4W	Carbon	
	R836	QRD141J-472S	4.7K	1/4W	Carbon	
	R837	QRD141J-474S	470K	1/4W	Carbon	
	R838	QRD141J-271S	270	1/4W	Carbon	
	R839	QRD141J-473S	47K	1/4W	Carbon	
	R840	QRD141J-185S	1.8K	1/4W	Carbon	
	R841	QRD141J-224S	220K	1/4W	Carbon	
	R842	QRD141J-474S	470K	1/4W	Carbon	
	R843	QRD141J-823S	82K	1/4W	Carbon	
	R844	QRD141J-223S	22K	1/4W	Carbon	
	R845	QRD141J-563S	56K	1/4W	Carbon	

△ : Safety Parts

Resistors

△	Item No.	Part Number	Description			Areas
	R846	QRD141J-473S	47K	1/4W	Carbon	
	R847	QRD141J-153S	15K	1/4W	Carbon	
	R848	QRD141J-333S	33K	1/4W	Carbon	
	R849	QRD141J-472S	4.7K	1/4W	Carbon	
	R850	QRD141J-103S	10K	1/4W	Carbon	
	R851	QRD141J-122S	1.2K	1/4W	Carbon	
	R852	QRD141J-103S	10K	1/4W	Carbon	
	R853	QRD141J-472S	4.7K	1/4W	Carbon	
△	R854	QRD145J-4R7S	4.7	1/4W	U.N.F. Carbon	
△	R855	QRD145J-4R7S	4.7	1/4W	U.N.F. Carbon	
	R856	QRD141J-154S	150K	1/4W	Carbon	
	R861	QRX017J-3R9S	3.9	1/4W	O.M. Film	
	R862	QRX017J-3R9S	3.9	1/4W	O.M. Film	
	R863	QRD141J-103S	10K	1/4W	Carbon	
△	R864	QRD145J-3R3S	3.9	1/4W	U.N.F. Carbon	A
△	R864	QRZ0062-120	12	1/4W	Fusible	B
△	R864	QRZ0062-120	12	1/4W	Fusible	C
	R865	QRD141J-393S	39K	1/4W	Carbon	
	R866	QRD141J-124S	120K	1/4W	Carbon	
	R867	QRD141J-273S	27K	1/4W	Carbon	
	R868	QRD145J-150S	15	1/4W	Carbon	A
	R868	QRZ0062-150	15	1/4W	Fusible	B
	R868	QRZ0062-150	15	1/4W	Fusible	C
	R869	QRD141J-822S	8.2K	1/4W	Carbon	
△	R871	QRD125J-2R2	2.2	1/2W	U.N.F. Carbon	
△	R872	QRD125J-2R2	2.2	1/2W	U.N.F. Carbon	
△	R873	QRX027J-150	15	2W	O.M.Film	
△	R874	QRZ0062-120	12	1/4W	Fusible	B
△	R874	QRZ0062-120	12	1/4W	Fusible	C
△	R881	QRG012J-562AF	5.6K	1/4W	O.M. Film	
△	R882	QRD145J-680S	68	1/4W	U.N.F. Carbon	
△	R883	QRD145J-680S	68	1/4W	U.N.F. Carbon	
	R884	QRD141J-473S	47K	1/4W	Carbon	
	R697	ERT-D2WHL202S			Thermistor	B C
	R698	ERT-D2WFL202S			Thermistor	B C

△: Safety Parts

Others

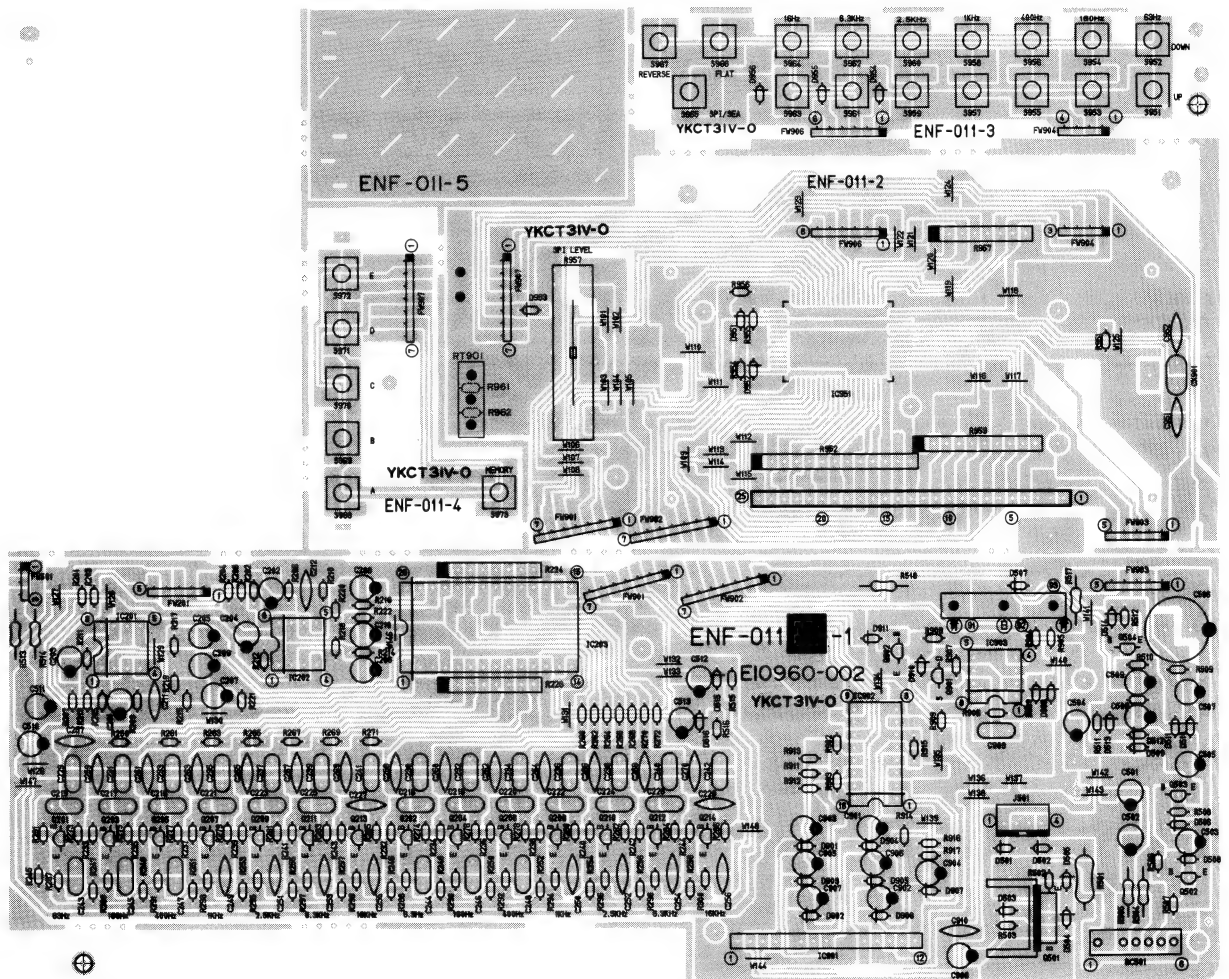
△	Item No.	Part Number	Description	Areas
		E10959-002	Circuit Board	
		E33754-005	Tie Band	
		E69826-H40B	Heat Sink	
		E70208-001	Plate	
		E70306-001	Heat Sink	
		E70306-001	Heat Sink	
		E300107-003	C.B.Holder	
		E300107-004	C.B.Holder	
		E33754-001	Tie Band	
		SBSB3008Z	Tapping Screw	
		SBSB3008Z	Tapping Screw	
		SBSB3008Z	Tapping Screw	
		SBSE3012Z	Screw	
		E302469-001	Heat Sink	
	J604	E04365-003	3P Socket	
	J605	E04365-003	3P Socket	
	J652	QMS6302-128	Headphone Jack	
	J671	EMB00TP-801C	Speaker Terminal	
	L651	EQL0002-1R0	Inductor	
	L652	EQL0002-1R0	Inductor	
	P601	QMV5005-003	3P Plug Assy	
	P602	QMV5005-007	7P Plug Assy	
	P603	QMV5005-006	6P Plug Assy	
	S651	QST4241-E07	Slide Switch	
	PW801	EWB23A-16RR	Twist Para Wire	
	RY701	ESK5D24-214	Relay	

3-(2) ENF-011A SEA & F. L. Display P. C. Board Ass'y

Note: ENH-011 □ varies according to the areas employed. See note (1) when placing an order.

Note (1)

Designated Areas	P.C. Board Ass'y
U.S.A., Canada	ENF-011 A
Europe, Australia, U.K., U.S. Military Market Other Countries	ENF-011 B



Each Individual P.C. Board Location

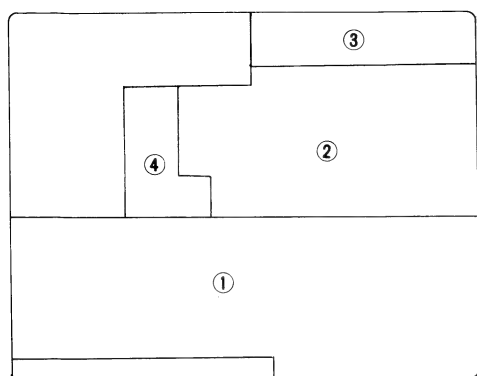


Fig. 5

- ① SEA Amp & SPK P. C. Board Ass'y
- ② Display P. C. Board Ass'y
- ③ Frequency Control SW P. C. Board Ass'y
- ④ Memory SW P. C. Board Ass'y

Transistors

⚠	Item No.	Part Number	Description	Areas
			Maker	
	Q201	2SC1775AV (E)	Silicon	Hitachi
	Q202	2SC1775AV (E)	Silicon	Hitachi
	Q203	2SC1775AV (E)	Silicon	Hitachi
	Q204	2SC1775AV (E)	Silicon	Hitachi
	Q205	2SC1775AV (E)	Silicon	Hitachi
	Q206	2SC1775AV (E)	Silicon	Hitachi
	Q207	2SC1775AV (E)	Silicon	Hitachi
	Q208	2SC1775AV (E)	Silicon	Hitachi
	Q209	2SC1775AV (E)	Silicon	Hitachi
	Q210	2SC1775AV (E)	Silicon	Hitachi
	Q211	2SC1775AV (E)	Silicon	Hitachi
	Q212	2SC1775AV (E)	Silicon	Hitachi
	Q213	2SC1775AV (E)	Silicon	Hitachi
	Q214	2SC1775AV (E)	Silicon	Hitachi
	Q501	2SD313V (D, E)	Silicon	Sanyo
	Q502	2SC458(C)	Silicon	Hitachi
	Q503	2SC2235 (O, Y)	Silicon	Toshiba
	Q504	DTA114YN	Silicon	Rohm
	Q901	2SK105 (F, H)	F.E.T.	NEC
	Q902	DTA114YN	Silicon	Rohm

Diodes

⚠	Item No.	Part Number	Description	Maker	Areas
	D501	MTZ8.2C	Zener	Rohm	
	D502	MTZ8.2C	Zener	Rohm	
	D503	MTZ20C	Zener	Rohm	
	D504	1SS119-02	Silicon	Hitachi	
	D505	1SS119-02	Silicon	Hitachi	
	D506	MTZ6.2C	Zener	Rohm	
	D507	MTZ3.3JB	Zener	Rohm	
	D508	1SS119-02	Silicon	Hitachi	
	D509	1SS119-02	Silicon	Hitachi	
	D510	1SS119-02	Silicon	Hitachi	
	D511	1SS119-02	Silicon	Hitachi	
	D512	1SS119-02	Silicon	Hitachi	
	D513	1SS119-02	Silicon	Hitachi	
	D514	1SS119-02	Silicon	Hitachi	
	D515	MTZ8.2C	Zener	Rohm	
	D516	MTZ8.2C	Zener	Rohm	
	D901	1SS119-02	Silicon	Hitachi	
	D902	1SS119-02	Silicon	Hitachi	
	D903	1SS119-02	Silicon	Hitachi	
	D904	1SS119-02	Silicon	Hitachi	
	D905	1SS119-02	Silicon	Hitachi	
	D906	1SS119-02	Silicon	Hitachi	
	D907	1SS119-02	Silicon	Hitachi	
	D908	1SS119-02	Silicon	Hitachi	
	D909	1SS119-02	Silicon	Hitachi	
	D910	1SS119-02	Silicon	Hitachi	
	D911	1SS119-02	Silicon	Hitachi	
	D951	MTZ9.1	Zener	Rohm	
	D952	1SS119-02	Silicon	Hitachi	
	D953	1SS119-02	Silicon	Hitachi	
	D954	1SS119-02	Silicon	Hitachi	
	D955	1SS119-02	Silicon	Hitachi	
	D956	1SS119-02	Silicon	Hitachi	

I.C.s

⚠	Item No.	Part Number	Description	Areas
			Maker	
	IC201	NJM4560D-X	I.C.	JRC
	IC202	NJM4560D-X	I.C.	JRC
	IC203	LM835N	I.C.	National
	IC901	SAB2-027	I.C.	Alps
	IC902	TC4051BP	I.C.	Toshiba
	IC903	NJM4558D	I.C.	JRC
	IC951	UPD7519G-557-12	I.C.	NEC

Capacitors

⚠	Item No.	Part Number	Description	Areas
	C201	QETC1HM-475	4.7 μ F 50V Electro	
	C202	QETC1HM-475	4.7 μ F 50V Electro	
	C203	QETC1CM-226	22 μ F 16V Electro	
	C204	QETC1CM-226	22 μ F 16V Electro	
	C205	QETC1CM-226	22 μ F 16V Electro	
	C206	QETC1CM-226	22 μ F 16V Electro	
	C207	QETC1CM-226	22 μ F 16V Electro	
	C208	QETC1CM-226	22 μ F 16V Electro	
	C209	QETC1CM-226	22 μ F 16V Electro	
	C210	QETC1CM-226	22 μ F 16V Electro	

⚠ Safety Parts

Capacitors

△	Item No.	Part Number	Description			Areas
	C211	QCS31HJ-221	220PF	50V	Ceramic	
	C212	QCS31HJ-221	220PF	50V	Ceramic	
	C215	QFV71HJ-224	0.22 μ F	50V	T.Film	
	C216	QFV71HJ-224	0.22 μ F	50V	T.Film	
	C217	QFV71HJ-683	0.068 μ F	50V	T.Film	
	C218	QFV71HJ-683	0.068 μ F	50V	T.Film	
	C219	QFV71HJ-273	0.027 μ F	50V	T.Film	
	C220	QFV71HJ-273	0.027 μ F	50V	T.Film	
	C221	QFN31HJ-123	0.012 μ F	50V	Mylar	
	C222	QFN31HJ-123	0.012 μ F	50V	Mylar	
	C223	QFV31HJ-472	4700PF	50V	Mylar	
	C224	QFV31HJ-472	4700PF	50V	Mylar	
	C225	QFN31HJ-222	2200PF	50V	Mylar	
	C226	QFN31HJ-222	2200PF	50V	Mylar	
	C227	QCS31HJ-681	680PF	50V	Ceramic	
	C228	QCS31HJ-681	680PF	50V	Ceramic	
	C229	QFV81HJ-684	0.68 μ F	50V	T.Film	
	C230	QFV71HJ-684	0.68 μ F	50V	T.Film	
	C231	QFV71HJ-334	0.33 μ F	50V	T.Film	
	C232	QFV71HJ-334	0.33 μ F	50V	T.Film	
	C233	QFV71HJ-124	0.12 μ F	50V	T.Film	
	C234	QFV71HJ-124	0.12 μ F	50V	T.Film	
	C235	QFV71HJ-473	0.047 μ F	50V	T.Film	
	C236	QFV71HJ-473	0.047 μ F	50V	T.Film	
	C237	QFN31HJ-183	0.018 μ F	50V	Mylar	
	C238	QFN31HJ-183	0.018 μ F	50V	Mylar	
	C239	QFN31HJ-682	6800PF	50V	Mylar	
	C240	QFN31HJ-682	6800PF	50V	Mylar	
	C241	QFN31HJ-332	3300PF	50V	Mylar	
	C242	QFN31HJ-332	3300PF	50V	Mylar	
	C243	QFN31HJ-822	8200PF	50V	Mylar	
	C244	QFN31HJ-822	8200PF	50V	Mylar	
	C245	QFN31HJ-272	2700PF	50V	Mylar	
	C246	QFN31HJ-272	2700PF	50V	Mylar	
	C247	QFN31HJ-122	1200PF	50V	Mylar	
	C248	QFN31HJ-122	1200PF	50V	Mylar	
	C249	QCS31HJ-471	470PF	50V	Ceramic	
	C250	QCS31HJ-471	470PF	50V	Ceramic	
	C251	QCS31HJ-221	220PF	50V	Ceramic	
	C252	QCS31HJ-221	220PF	50V	Ceramic	
	C253	QCS31HJ-680	68PF	50V	Ceramic	
	C254	QCS31HJ-680	68PF	50V	Ceramic	
	C255	QCS31HJ-330	33PF	50V	Ceramic	
	C256	QCS31HJ-330	33PF	50V	Ceramic	
	C501	QETC1EM-106	10 μ F	25V	Electro	
	C502	QETC1EM-106	10 μ F	25V	Electro	
	C503	QETC1CM-226	26 μ F	16V	Electro	
	C504	QETC1AM-107	100 μ F	10V	Electro	
	C505	QETC1AM-107	100 μ F	10V	Electro	
	C506	EEZ0501-229	0.022 μ F	5.5V		
	C507	QETB1AM-477	470 μ F	10V	Electro	
	C508	QETC1HM-475	4.7 μ F	50V	Electro	
	C509	QETC1HM-475	4.7 μ F	50V	Electro	
	C510	QETC1CM-227	220 μ F	16V	Electro	
	C511	QETC1CM-227	220 μ F	16V	Electro	
	C512	QETC1AM-107	100 μ F	10V	Electro	
	C513	QETC1AM-107	100 μ F	10V	Electro	
	C515	QCF21HP-223	0.022 μ F	50V		
	C901	QETC1HM-105	1 μ F	50V	Electro	
	C902	QETC1HM-105	1 μ F	50V	Electro	

Capacitors

△	Item No.	Part Number	Description			Areas
	C903	QETC1HM-105	1 μ F	50V	Electro	
	C904	QETC1HM-105	1 μ F	50V	Electro	
	C905	QETC1HM-105	1 μ F	50V	Electro	
	C906	QETC1HM-105	1 μ F	50V	Electro	
	C907	QETC1HM-105	1 μ F	50V	Electro	
	C908	QETC1HM-105	1 μ F	50V	Electro	
	C909	QFN31HJ-472	4700PF	50V	Mylar	
	C951	QCS31HJ-270	27PF	50V	Ceramic	
	C952	QCS31HJ-270	27PF	50V	Ceramic	

Resistors

△	Item No.	Part Number	Description			Areas
	R201	QRD161J-273	27K	1/6W	Carbon	
	R202	QRD161J-273	27K	1/6W	Carbon	
	R203	QRD161J-220	22	1/6W	Carbon	
	R204	QRD161J-220	22	1/6W	Carbon	
	R205	QRD161J-823	82K	1/6W	Carbon	
	R206	QRD161J-823	82K	1/6W	Carbon	
	R207	QRD161J-223	22K	1/6W	Carbon	
	R208	QRD161J-223	22K	1/6W	Carbon	
	R209	QRD161J-393	39K	1/6W	Carbon	
	R210	QRD161J-393	39K	1/6W	Carbon	
	R211	QRD161J-103	10K	1/6W	Carbon	
	R212	QRD161J-103	10K	1/6W	Carbon	
	R213	QRD161J-103	10K	1/6W	Carbon	
	R214	QRD161J-103	10K	1/6W	Carbon	
	R215	QRD161J-274	270K	1/6W	Carbon	
	R216	QRD161J-274	270K	1/6W	Carbon	
	R217	QRD161J-104	100K	1/6W	Carbon	
	R218	QRD161J-104	100K	1/6W	Carbon	
	R219	QRD161J-154	150K	1/6W	Carbon	
	R220	QRD161J-154	150K	1/6W	Carbon	
	R221	QRD161J-104	100K	1/6W	Carbon	
	R222	QRD161J-104	100K	1/6W	Carbon	
	R231	QRD161J-183	18K	1/6W	Carbon	
	R232	QRD161J-183	18K	1/6W	Carbon	
	R233	QRD161J-183	18K	1/6W	Carbon	
	R234	QRD161J-183	18K	1/6W	Carbon	
	R235	QRD161J-183	18K	1/6W	Carbon	
	R236	QRD161J-183	18K	1/6W	Carbon	
	R237	QRD161J-183	18K	1/6W	Carbon	
	R238	QRD161J-183	18K	1/6W	Carbon	
	R239	QRD161J-183	18K	1/6W	Carbon	
	R240	QRD161J-183	18K	1/6W	Carbon	
	R241	QRD161J-183	18K	1/6W	Carbon	
	R242	QRD161J-183	18K	1/6W	Carbon	
	R243	QRD161J-183	18K	1/6W	Carbon	
	R244	QRD161J-183	18K	1/6W	Carbon	
	R245	QRD161J-683	68K	1/6W	Carbon	
	R246	QRD161J-683	68K	1/6W	Carbon	
	R247	QRD161J-683	68K	1/6W	Carbon	
	R248	QRD161J-683	68K	1/6W	Carbon	
	R249	QRD161J-683	68K	1/6W	Carbon	
	R250	QRD161J-683	68K	1/6W	Carbon	
	R251	QRD161J-683	68K	1/6W	Carbon	
	R252	QRD161J-683	68K	1/6W	Carbon	
	R253	QRD161J-683	68K	1/6W	Carbon	

△ : Safety Parts

Resistors

△	Item No.	Part Number	Description			Areas
	R254	QRD161J-683	68K	1/6W	Carbon	
	R255	QRD161J-683	68K	1/6W	Carbon	
	R256	QRD161J-683	68K	1/6W	Carbon	
	R257	QRD161J-683	68K	1/6W	Carbon	
	R258	QRD161J-683	68K	1/6W	Carbon	
	R259	QRD161J-820	82	1/6W	Carbon	
	R260	QRD161J-820	82	1/6W	Carbon	
	R261	QRD161J-820	82	1/6W	Carbon	
	R262	QRD161J-820	82	1/6W	Carbon	
	R263	QRD161J-820	82	1/6W	Carbon	
	R264	QRD161J-820	82	1/6W	Carbon	
	R265	QRD161J-820	82	1/6W	Carbon	
	R266	QRD161J-820	82	1/6W	Carbon	
	R267	QRD161J-820	82	1/6W	Carbon	
	R268	QRD161J-820	82	1/6W	Carbon	
	R269	QRD161J-820	82	1/6W	Carbon	
	R270	QRD161J-820	82	1/6W	Carbon	
	R271	QRD161J-820	82	1/6W	Carbon	
	R272	QRD161J-820	82	1/6W	Carbon	
	R273	QRD161J-561	560	1/6W	Carbon	
	R274	QRD161J-561	560	1/6W	Carbon	
	R275	QRD161J-561	560	1/6W	Carbon	
	R276	QRD161J-561	560	1/6W	Carbon	
	R277	QRD161J-561	560	1/6W	Carbon	
	R278	QRD161J-561	560	1/6W	Carbon	
	R279	QRD161J-561	560	1/6W	Carbon	
	R280	QRD161J-561	560	1/6W	Carbon	
	R281	QRD161J-561	560	1/6W	Carbon	
	R282	QRD161J-561	560	1/6W	Carbon	
	R283	QRD161J-561	560	1/6W	Carbon	
	R284	QRD161J-561	560	1/6W	Carbon	
	R285	QRD161J-561	560	1/6W	Carbon	
	R286	QRD161J-561	560	1/6W	Carbon	
	R287	QRD161J-822	8.2K	1/6W	Carbon	
	R288	QRD161J-822	8.2K	1/6W	Carbon	
	R289	QRD161J-822	8.2K	1/6W	Carbon	
	R290	QRD161J-822	8.2K	1/6W	Carbon	
	R291	QRD161J-822	8.2K	1/6W	Carbon	
	R292	QRD161J-822	8.2K	1/6W	Carbon	
	R293	QRD161J-822	8.2K	1/6W	Carbon	
	R294	QRD161J-822	8.2K	1/6W	Carbon	
	R295	QRD161J-822	8.2K	1/6W	Carbon	
	R296	QRD161J-822	8.2K	1/6W	Carbon	
	R297	QRD161J-822	8.2K	1/6W	Carbon	
	R298	QRD161J-822	8.2K	1/6W	Carbon	
	R299	QRD161J-822	8.2K	1/6W	Carbon	
	R300	QRD161J-822	8.2K	1/6W	Carbon	
	R501	QRD125J-121	120	1/2W	Carbon	
	R502	QRD161J-100	10	1/6W	Carbon	
	R503	QRD161J-103	10K	1/6W	Carbon	
△	R504	QRZ0062-220	22	1/4W	Fusible	
△	R505	QRZ0062-220	22	1/4W	Fusible	
	R506	QRD161J-273	27K	1/6W	Carbon	
	R507	QRD161J-103	10K	1/6W	Carbon	
	R508	QRD161J-392	3.9K	1/6W	Carbon	
	R509	QRD161J-101	100	1/6W	Carbon	
	R510	QRD161J-103	10K	1/6W	Carbon	
	R511	QRD161J-224	220K	1/6W	Carbon	
	R512	QRD161J-224	220K	1/6W	Carbon	
△	R513	QRZ0062-470	47	1/4W	Fusible	

Resistors

△	Item No.	Part Number	Description			Areas
	R514	QRZ0062-470	47	1/4W	Fusible	
	R515	QRD161J-122	1.2K	1/6W	Carbon	
	R516	QRD161J-122	1.2K	1/6W	Carbon	
△	R517	QRD145J-3R3S	3.3	1/4W	U.N.F. Carbon	A
△	R517	QRD145J-2R7S	2.7	1/4W	U.N.F. Carbon	B
△	R518	QRD145J-3R3S	3.3	1/4W	U.N.F. Carbon	A
△	R518	QRD145J-2R7S	2.7	1/4W	U.N.F. Carbon	B
	R902	QRD161J-822	8.2K	1/6W	Carbon	
	R903	QRD161J-103	10K	1/6W	Carbon	
	R904	QRD161J-103	10K	1/6W	Carbon	
	R905	QRD161J-153	15K	1/6W	Carbon	
	R906	QRD161J-222	2.2K	1/6W	Carbon	
	R907	QRD161J-223	22K	1/6W	Carbon	
	R908	QRD161J-103	10K	1/6W	Carbon	
	R909	QRD161J-563	56K	1/6W	Carbon	
	R911	QRD161J-474	470K	1/6W	Carbon	
	R912	QRD161J-474	470K	1/6W	Carbon	
	R913	QRD161J-474	470K	1/6W	Carbon	
	R914	QRD161J-474	470K	1/6W	Carbon	
	R915	QRD161J-474	470K	1/6W	Carbon	
	R916	QRD161J-474	470K	1/6W	Carbon	
	R917	QRD161J-474	470K	1/6W	Carbon	
	R951	QRD161J-223	22K	1/6W	Carbon	
	R954	QRD161J-683	68K	1/6W	Carbon	
	R955	QRD161J-473	47K	1/6W	Carbon	
	R956	QRD161J-332	3.3K	1/6W	Carbon	
	R958	QVZ5310-002			Variable	
	R961	QRD161J-223	22K	1/6W	Carbon	
	R962	QRD161J-223	22K	1/6W	Carbon	

Others

△	Item No.	Part Number	Description	Areas
		E10960-002	Circuit Board	
		E303550-001	FL Holder	
		E70306-001	Heat Sink	
		E67764-003	Terminal	
		E300796-001	Fastener	
		E302321-001	Fastener	
		SBSB3008Z	Tapping Screw	
		E48729-007	Plastic Rivet	
	R224	ERGS7XK-474	Resistor Array	
	R224	ERGS7XK-474	Resistor Array	
	R952	ERGSCXK-104	Resistor Array	
	R953	ERGS9XK-104	Resistor Array	
	R957	ERGS7XK-223	Resistor Array	
	S951	ESP0001-007	Push Switch	
	S952	ESP0001-007	Push Switch	
	S953	ESP0001-007	Push Switch	
	S954	ESP0001-007	Push Switch	
	S955	ESP0001-007	Push Switch	
	S956	ESP0001-007	Push Switch	
	S957	ESP0001-007	Push Switch	
	S958	ESP0001-007	Push Switch	
	S959	ESP0001-007	Push Switch	
	S960	ESP0001-007	Push Switch	
	S961	ESP0001-007	Push Switch	
	S962	ESP0001-007	Push Switch	

△ : Safety Parts

3-(3) ENE-004 □ Control P. C. Board Ass'y

Note: ENE-004 varies according to the areas employed. See not (1) when placing an order.

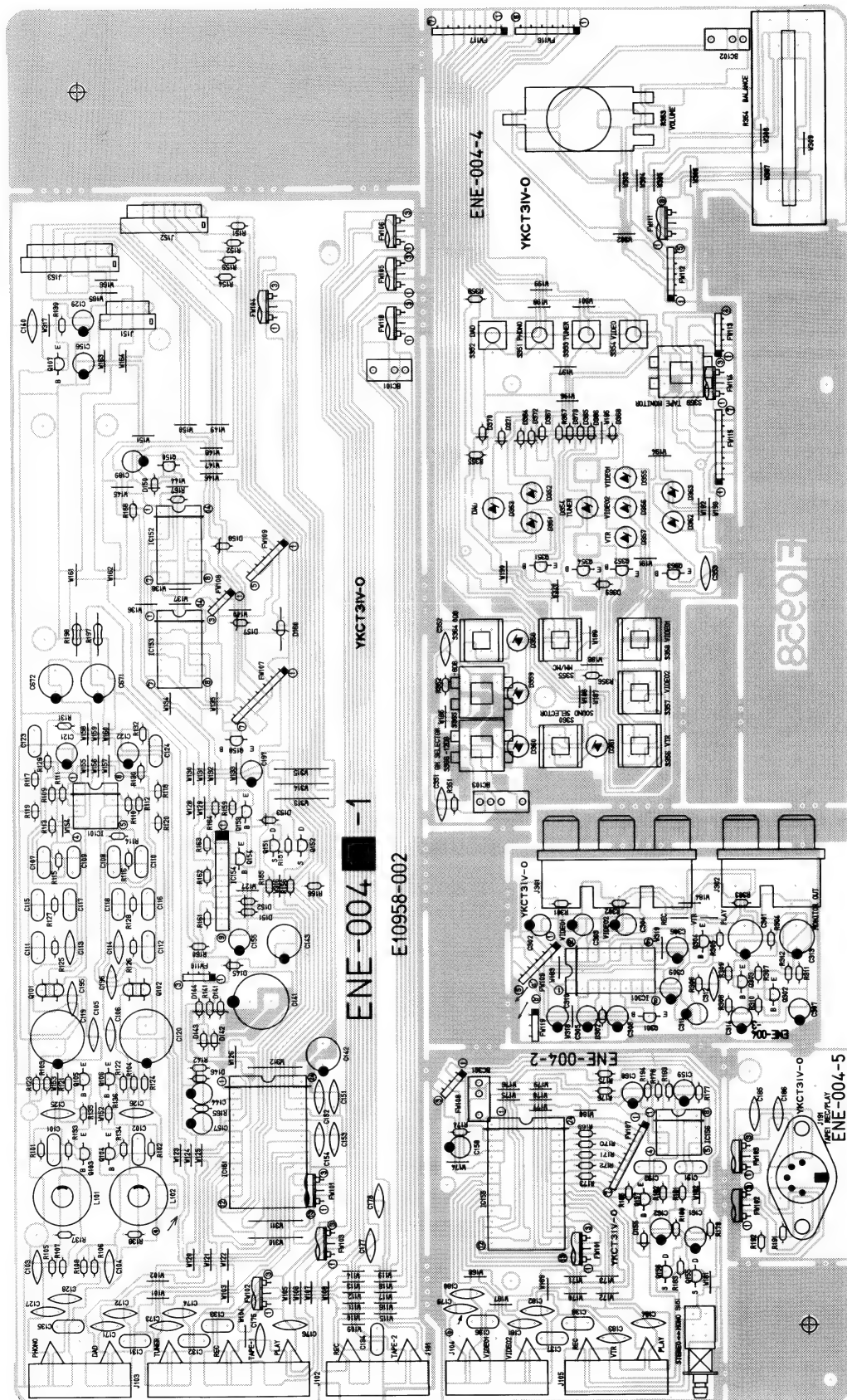



Fig. 6

Others

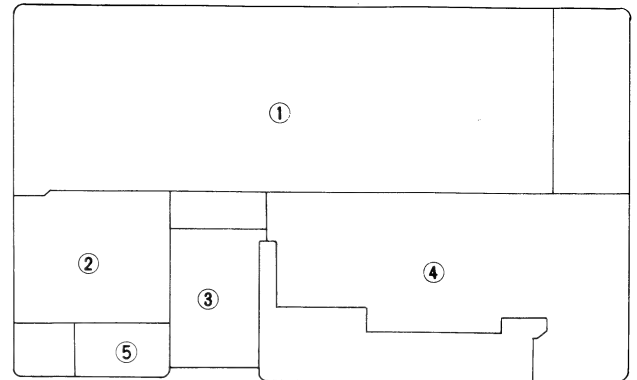
 Item No.	Part Number	Description	Areas
S963	ESP0001-007	Push Switch	
S964	ESP0001-007	Push Switch	
S965	ESP0001-007	Push Switch	
S965	ESP0001-007	Push Switch	
S966	ESP0001-007	Push Switch	
S967	ESP0001-007	Push Switch	
S968	ESP0001-007	Push Switch	
S969	ESP0001-007	Push Switch	
S970	ESP0001-007	Push Switch	
S971	ESP0001-007	Push Switch	
S972	ESP0001-007	Push Switch	
S973	ESP0001-007	Push Switch	
FL951	ELU0001-023	F.L. Tube	
RT501	E67764-303	Wrapping Terminal	
CX901	ECX0004-190KU	Resonator	

 : Safety Parts

Note (1)

Designated Areas	P.C. Board Ass'y
U.S.A., Canada	ENE-004 A
Europe, Australia U.S. Military Market U.K., Other Countries	ENE-004 B
West Germany	ENE-004 C

- ① EQ Amp & Analog Switch P.C. Board Ass'y
 ② Analog Switch P.C. Board Ass'y
 ③ Video Amp & Analog Switch P.C. Board Ass'y
 ④ Source Switch & Volume P.C. Board Ass'y
 ⑤ Din. Socket P.C. Board Ass'y

**Fig. 7****Transistors**

△	Item No.	Part Number	Description	Maker	Areas
	Q101	2SK240V (BL, V)	F.E.T.	Toshiba	
	Q102	2SK240V (BL, V)	Silicon	Toshiba	
	Q103	2SD655(E, F)	Silicon	Hitachi	
	Q104	2SD655(E, F)	Silicon	Hitachi	
	Q105	2SD655(E, F)	Silicon	Hitachi	
	Q106	2SD655 (E, F)	Silicon	Hitachi	
	Q107	DTA144N	Silicon	Rohm	
	Q150	DTA144YN	Silicon	Rohm	
	Q151	2SK163 (L1)	F.E.T.	NEC	
	Q152	2SK163 (L1)	F.E.T.	NEC	
	Q153	DTA144N	Silicon	Rohm	
	Q154	DTC144N	Silicon	Rohm	
	Q155	2SK105 (F, H)	F.E.T.	NEC	
	Q156	2SK105 (F, H)	F.E.T.	NEC	
	Q157	DTA144N	Silicon	Rohm	
	Q158	DTA144N	Silicon	Rohm	
	Q301	DTC144N	Silicon	Rohm	
	Q302	2SC458 (C)	Silicon	Hitachi	
	Q303	2SC458 (C)	Silicon	Hitachi	
	Q304	2SC458 (C)	Silicon	Hitachi	
	Q351	2SC458 (C)	Silicon	Hitachi	
	Q352	2SC458 (C)	Silicon	Hitachi	
	Q353	2SA1029 (C, D)	Silicon	Hitachi	
	Q354	DTC144N	Silicon	Rohm	

I.C.s

△	Item No.	Part Number	Description	Maker	Areas
	IC101	NJM4560D-X	I.C.	JRC	
	IC151	TC9152P	I.C.	Toshiba	
	IC152	TC4023BP	I.C.	Toshiba	
	IC153	TC4011BP	I.C.	Toshiba	
	IC154	TA7317P	I.C.	Toshiba	
	IC155	TC9151P	I.C.	Toshiba	
	IC156	M5218P	I.C.	Mitsubishi	
	IC301	M51320P	I.C.	Mitsubishi	

Diodes

△	Item No.	Part Number	Description	Maker	Areas
	D141	MTZ5.6C	Zener		
	D142	1SS119-02	Silicon	Hitachi	
	D143	1SS119-02	Silicon	Hitachi	
	D144	1SS119-02	Silicon	Hitachi	
	D145	1SS119-02	Silicon	Hitachi	
	D146	1SS119-02	Silicon	Hitachi	
	D150	1SS119-02	Silicon	Hitachi	
	D151	1SS119-02	Silicon	Hitachi	
	D152	1SS119-02	Silicon	Hitachi	
	D153	1SS119-02	Silicon	Hitachi	
	D155	1SS119-02	Silicon	Hitachi	
	D157	MTZ5.6C	Zener	Rohm	
	D158	MTZ4.7B	Zener	Rohm	
	D160	RD2.7EB2	Zener	NEC	
	D302	1SS119-02	Silicon	Hitachi	
	D351	SLR-54DC50F165	L.E.D.	Rohm	
	D352	SLR-54DC50F165	L.E.D.	Rohm	
	D353	SLR-54DC50F165	L.E.D.	Rohm	
	D354	SLR-54DC50F165	L.E.D.	Rohm	
	D355	SLR-54DC50F165	L.E.D.	Rohm	
	D356	SLR-54DC50F165	L.E.D.	Rohm	
	D357	SLR-54DC50F165	L.E.D.	Rohm	
	D358	SLR-54DC50F165	L.E.D.	Rohm	
	D359	SLR-54DC50F165	L.E.D.	Rohm	
	D360	SLR-54DC50F165	L.E.D.	Rohm	
	D361	SLR-54VC50F165	L.E.D.	Rohm	
	D362	SLR-54VC50F165	L.E.D.	Rohm	
	D363	SLR-54VC50F165	L.E.D.	Rohm	
	D364	1SS119-02	Silicon	Hitachi	
	D365	1SS119-02	Silicon	Hitachi	
	D366	1SS119-02	Silicon	Hitachi	
	D367	1SS119-02	Silicon	Hitachi	
	D368	1SS119-02	Silicon	Hitachi	
	D369	1SS119-02	Silicon	Hitachi	
	D370	1SS119-02	Silicon	Hitachi	
	D371	1SS119-02	Silicon	Hitachi	
	D372	1SS119-02	Silicon	Hitachi	
	D373	1SS119-02	Silicon	Hitachi	

Fig. 7

Capacitors

⚠	Item No.	Part Number	Description			Areas
	C101	QFN31HJ-103	0.01 μ F	50V	Mylar	
	C102	QFN31HJ-103	0.01 μ F	50V	Mylar	
	C103	QCS31HJ-151	150PF	50V	Ceramic	<input type="checkbox"/>
	C104	QCS31HJ-151	150PF	50V	Ceramic	<input type="checkbox"/>
	C105	QCY31HK-821	820PF	50V	Ceramic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	C105	QCY31HK-821	820PF	50V	Ceramic	<input type="checkbox"/>
	C106	QCY31HK-821	820PF	50V	Ceramic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	C106	QCY31HK-821	820PF	50V	Ceramic	<input type="checkbox"/>
	C107	QFN31HJ-392	3900PF	50V	Mylar	
	C108	QFN31HJ-392	3900PF	50V	Mylar	
	C109	QFN31HJ-822	8200PF	50V	Mylar	
	C110	QFN31HJ-822	8200PF	50V	Mylar	
	C111	QFN31HJ-472	4700PF	50V	Mylar	
	C112	QFN31HJ-472	4700PF	50V	Mylar	
	C113	QCS31HJ-331	330PF	50V	Ceramic	
	C114	QCS31HJ-331	330PF	50V	Ceramic	
	C115	QFN31HJ-153	0.015PF	50V	Mylar	
	C116	QFN31HJ-153	0.015PF	50V	Mylar	
	C117	QFN31HJ-272	2700PF	50V	Ceramic	
	C118	QFN31HJ-272	2700PF	50V	Ceramic	
	C119	QETB0JM-228	2.200 μ	63V	Electro	
	C120	QETB0JM-228	2.200 μ	63V	Electro	
	C121	QETC1HM-475	4.7 μ F	50V	Electro	
	C122	QETC1HM-475	4.7 μ F	50V	Electro	
	C123	QFN31HJ-473	0.047 μ F	50V	Mylar	
	C124	QFN31HJ-473	0.047 μ F	50V	Mylar	
	C127	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>
	C128	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>
	C129	QETC1HM-226	22 μ F	50V	Electro	
	C131	QFN31HK-103	0.01 μ F	50V	Mylar	
	C132	QFN31HK-103	0.01 μ F	50V	Mylar	
	C133	QFN31HK-103	0.01 μ F	50V	Mylar	
	C134	QFN31HK-103	0.01 μ F	50V	Mylar	
	C135	QFV71HJ-154	0.15 μ F	50V	T. Film	
	C136	QFN31HK-103	0.01 μ F	50V	Mylar	
	C137	QFN31HK-103	0.01 μ F	50V	Mylar	
	C138	QFN31HK-103	0.01 μ F	50V	Mylar	
	C141	EEZ0501-229	0.022 μ F	55V		
	C142	QBTB1CM-477	470 μ F	50V	Electro	
	C143	QETC1EM-106	10 μ F	50V	Electro	
	C144	QETC1HM-474	0.47 μ F	50V	Electro	
	C151	QCS31HJ-101	100PF	50V	Ceramic	
	C152	QCS31HJ-101	100PF	50V	Ceramic	
	C153	QCS31HJ-101	100PF	50V	Ceramic	
	C154	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>
	C155	QETC1CM-226	22 μ F	16V	Electro	
	C156	QETC1CM-475	4.7 μ F	16V	Electro	
	C157	QETC1HM-105	1 μ F	50V	Electro	
	C158	QETC1HM-105	1 μ F	50V	Electro	
	C159	QETC1HM-105	1 μ F	50V	Electro	
	C160	QETC1HM-105	1 μ F	50V	Electro	
	C161	QETC1HM-475	4.7 μ F	50V	Electro	
	C162	QETC1HM-475	4.7 μ F	50V	Electro	
	C171	QCS31HJ-221	220 μ F	50V	Ceramic	<input type="checkbox"/>
	C172	QCS31HJ-221	220 μ F	50V	Ceramic	<input type="checkbox"/>
	C173	QCS31HJ-221	220 μ F	50V	Ceramic	<input type="checkbox"/>
	C174	QCS31HJ-221	220 μ F	50V	Ceramic	<input type="checkbox"/>
	C175	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>
	C176	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>
	C177	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>

Capacitors

⚠	Item No.	Part Number	Description			Areas
	C178	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>
	C179	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>
	C180	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>
	C181	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>
	C182	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>
	C183	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>
	C184	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>
	C189	QETC1HM-105	1 μ F	50V	Electro	
	C195	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>
	C196	QCS31HJ-101	100PF	50V	Ceramic	<input type="checkbox"/>
	C197	QETC1HM-225	2.2 μ F	50V	Electro	
	C301	QETB1AM-477	470 μ F	10V	Electro	
	C302	QETC1CM-476	47 μ F	50V	Electro	
	C303	QETC1CM-476	47 μ F	50V	Electro	
	C304	QETC1CM-476	47 μ F	50V	Electro	
	C305	QETC1CM-476	47 μ F	50V	Electro	
	C306	QETC1CM-476	47 μ F	50V	Electro	
	C307	QETC1CM-477	470 μ F	50V	Electro	<input type="checkbox"/>
	C308	QETC1HM-475	4.7 μ F	50V	Electro	
	C309	QETC1HM-475	4.7 μ F	50V	Electro	
	C310	QETC1HM-475	4.7 μ F	50V	Electro	
	C311	QETC1HM-476	4.7 μ F	50V	Electro	
	C312	QCS31HJ-180	18PF	50V	Ceramic	
	C313	QETB1CM-477	470 μ F	16V	Electro	
	C314	QETC1CM-476	47 μ F	16V	Electro	
	C351	QCS31HJ-150	15PF	50V	Ceramic	
	C352	QCS31HJ-150	15PF	50V	Ceramic	
	C353	QCS31HJ-101	100PF	50V	Ceramic	
	C671	QETC1EM-107	100 μ F	25V	Electro	
	C672	QETC1EM-107	100 μ F	25V	Electro	

Resistors

⚠	Item No.	Part Number	Description			Areas
	R101	QRD161J-101	100	1/6W	Carbon	
	R102	QRD161J-101	100	1/6W	Carbon	
	R103	QRD161J-5R6	5.6	1/6W	Carbon	
	R104	QRD161J-5R6	5.6	1/6W	Carbon	
	R105	QRD161J-471	470	1/6W	Carbon	
	R106	QRD161J-471	470	1/6W	Carbon	
	R107	QRD161J-473	47K	1/6W	Carbon	
	R108	QRD161J-473	47K	1/6W	Carbon	
	R109	QRD161J-562	5.6K	1/6W	Carbon	
	R110	QRD161J-562	5.6K	1/6W	Carbon	
	R111	QRD161J-562	5.6K	1/6W	Carbon	
	R112	QRD161J-562	5.6K	1/6W	Carbon	
	R113	QRD161J-270	27	1/6W	Carbon	
	R114	QRD161J-270	27	1/6W	Carbon	
	R115	QRD161J-561	560	1/6W	Carbon	
	R116	QRD161J-561	560	1/6W	Carbon	
	R117	QRD161J-272	2.7K	1/6W	Carbon	
	R118	QRD161J-272	2.7K	1/6W	Carbon	
	R119	QRD161J-222	2.2K	1/6W	Carbon	
	R120	QRD161J-222	2.2K	1/6W	Carbon	
	R121	QRD161J-221	220	1/6W	Carbon	
	R122	QRD161J-221	220	1/6W	Carbon	
	R123	QRD161J-180	18	1/6W	Carbon	
	R124	QRD161J-180	18	1/6W	Carbon	
	R125	QRD161J-153	15K	1/6W	Carbon	

⚠ : Safety Parts

Resistors

Item No.	Part Number	Description	Areas
R126	QRD161J-153	15K 1/6W Carbon	
R127	QRD161J-184	180K 1/6W Carbon	
R128	QRD161J-184	180K 1/6W Carbon	
R129	QRD161J-331	330 1/6W Carbon	
R130	QRD161J-331	330 1/6W Carbon	
R131	QRD161J-104	100K 1/6W Carbon	
R132	QRD161J-104	100K 1/6W Carbon	
R133	QRD161J-273	27K 1/6W Carbon	
R134	QRD161J-273	27K 1/6W Carbon	
R135	QRD161J-273	27K 1/6W Carbon	
R136	QRD161J-273	27K 1/6W Carbon	
R137	QRD161J-152	1.5K 1/6W Carbon	
R138	QRD161J-152	1.5K 1/6W Carbon	
R139	QRD161J-223	22K 1/6W Carbon	
R141	QRD161J-472	4.7K 1/6W Carbon	
R142	QRD161J-104	100K 1/6W Carbon	
R151	QRD161J-101	100 1/6W Carbon	
R152	QRD161J-101	100 1/6W Carbon	
R153	QRD161J-101	100 1/6W Carbon	
R154	QRD161J-101	100 1/6W Carbon	
R155	QRD161J-102	1K 1/6W Carbon	
R156	QRD161J-102	1K 1/6W Carbon	
R157	QRD161J-105	1M 1/6W Carbon	
R159	QRD161J-103	10K 1/6W Carbon	
R160	QRD161J-562	5.6K 1/6W Carbon	
R161	QRD161J-473	47K 1/6W Carbon	
R162	QRD161J-392	3.9K 1/6W Carbon	
R163	QRD161J-104	100K 1/6W Carbon	
R164	QRD161J-104	100K 1/6W Carbon	
R165	QRD161J-333	33K 1/6W Carbon	
R166	QRD161J-103	10K 1/6W Carbon	
R167	QRD161J-473	47K 1/6W Carbon	
R168	QRD161J-392	3.9K 1/6W Carbon	
R169	QRD161J-123	12K 1/6W Carbon	
R170	QRD161J-123	12K 1/6W Carbon	
R171	QRD161J-123	12K 1/6W Carbon	
R172	QRD161J-123	12K 1/6W Carbon	
R173	QRD161J-123	12K 1/6W Carbon	
R174	QRD161J-333	33K 1/6W Carbon	
R175	QRD161J-102	1K 1/6W Carbon	
R176	QRD161J-102	1K 1/6W Carbon	
R177	QRD161J-474	470K 1/6W Carbon	
R178	QRD161J-474	470K 1/6W Carbon	
R179	QRD161J-473	47K 1/6W Carbon	
R180	QRD161J-473	47K 1/6W Carbon	
R181	QRD161J-472	4.7K 1/6W Carbon	
R182	QRD161J-472	4.7K 1/6W Carbon	
R183	QRD161J-105	1M 1/6W Carbon	
R185	QRD161J-103	10K 1/6W Carbon	
R191	QRD161J-104	100K 1/6W Carbon	[B] [C]
R192	QRD161J-104	100K 1/6W Carbon	[B] [C]
R301	QRD161J-750	75 1/6W Carbon	
R302	QRD161J-750	75 1/6W Carbon	
R303	QRD161J-750	75 1/6W Carbon	
R304	QRD161J-750	75 1/6W Carbon	
R305	QRD161J-471	470 1/6W Carbon	
R306	QRD161J-152	1.5K 1/6W Carbon	
R307	QRD161J-272	2.7K 1/6W Carbon	
R308	QRD161J-683	68K 1/6W Carbon	
R309	QRD161J-473	47K 1/6W Carbon	

Resistors

Item No.	Part Number	Description	Areas
R310	QRD161J-302	3K 1/6W Carbon	
R311	QRD161J-471	470 1/6W Carbon	
R312	QRD161J-470	47 1/6W Carbon	
R351	QRD161J-333	33K 1/6W Carbon	
R352	QRD161J-333	33K 1/6W Carbon	
R353	QVN9A3B-5F5V	Variable	
R354	QVT1C6M-1F5	S. Variable	
R355	QRD161J-103	10K 1/6W Carbon	
R356	QRD161J-103	10K 1/6W Carbon	
R357	QRD161J-270	27 1/6W Carbon	
R358	QRD161J-221	220 1/6W Carbon	
R359	QRD161J-103	10K 1/6W Carbon	
R671	QRZ0062-101	100 1/4W Fusible	
R672	QRZ0062-101	100 1/4W Fusible	

Others

Item No.	Part Number	Description	Areas
J101	EMN00TV-404A	4P Pin Jack	
J102	EMN00TV-603A	6P Pin Jack	
J103	EMN00TV-406A	4P Pin Jack (E)	
J104	EMN00TV-406A	4P Pin Jack (E)	
J105	EMN00TV-404A	4P Pin Jack	
J151	E04365-003	3P Socket	
J152	E04365-006	6P Connector	
J153	E04365-007	F.W.Socket	
J191	E03623-003	Din Socket	
J301	EMN00YV-302A	3P Pin Jack	
J302	EMN00YV-201A	Pin Jack	
S151	QST5101-E03	Push Switch	
S351	ESP0001-007	Push Switch	
S352	ESP0001-007	Puch Switch	
S353	ESP0001-007	Push Switch	
S354	ESP0001-007	Push Switch	
S355	QST0331-E02	Push Switch	
S356	QST0331-E03	Push Switch	
S359	QST0101-E01	Push Switch	
S364	QST0331-E01	Push Switch	
L101	EQL0111-151	Inductor	[C]
L102	EQL0111-151	Inductor	[C]
	E10958-002	Circuit Board	
	E303455-001	L.E.D. Holder	
	E03532-001	Shield Case	

△ : Safety Parts

3-(4) ENC-007B Tape Switch P. C. Board Ass'y

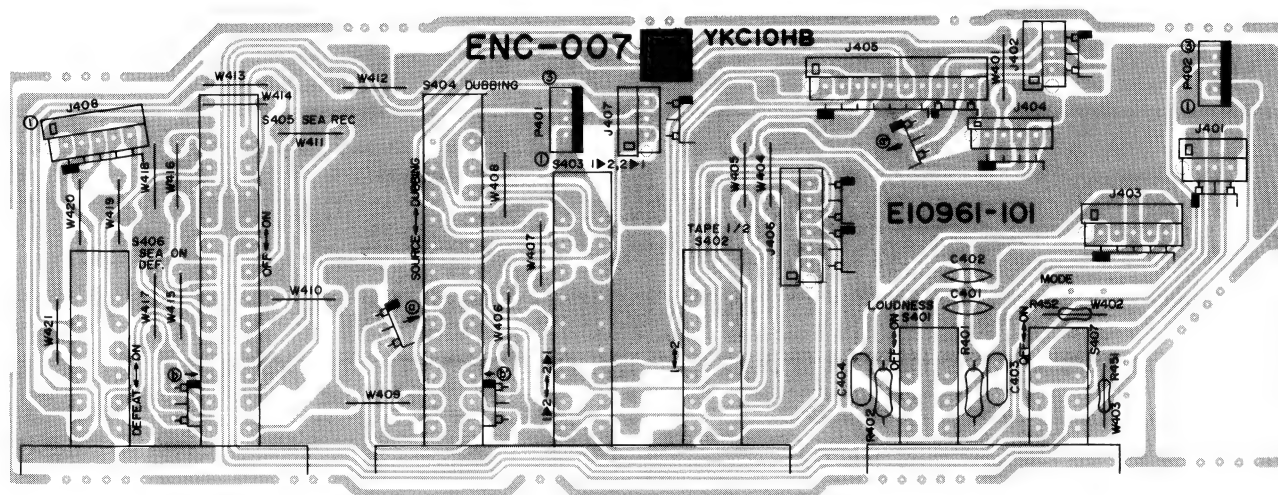


Fig. 8

Capacitors

△	Item No.	Part Number	Description			Areas
	C401	QCS31HJ-181	180P	50V	Ceramic	
	C402	QCS31HJ-181	180P	50V	Ceramic	
	C403	QFN31HK-333	0.033μ	50V	Mylar	
	C404	QFN31HK-333	0.033μ	50V	Mylar	

Resistors

△	Item No.	Part Number	Description			Areas
	R401	QRD141J-223S	22K	1/4W	Carbon	
	R402	QRD141J-223S	22K	1/4W	Carbon	
	R451	QRD141J-472S	4.7K	1/4W	Carbon	
	R452	QRD141J-472S	4.7K	1/4W	Carbon	

Others

△	Item No.	Part Number	Description	Areas
		E10961-001	Circuit Board	
	S401	QST4261-E08	Push SW (for Loud. SW)	
	S402	QST4361-E04	Push SW (for TAPE SW)	
	S403	QST4361-E04	Push SW (for TAPE SW)	
	S404	QST4361-E04	Push SW (for TAPE SW)	
	S405	QST4261-E04	Push SW (for SEA SW)	
	S406	QST4261-E04	Push SW (for SEA SW)	
	S407	QST4261-E08	Push SW (for MODE SW)	
	P401	QMV5005-003	3P Plug Ass'y	
	P402	QMV5005-003	3P Plug Ass'y	
	J401	E04365-003	F.W. Socket	
	J402	E04365-003	F.W. Socket	
	J403	E04365-005	F.W. Socket	
	J404	E04365-004	4P Socket Assy	
	J405	E04365-010	F.W. Socket	
	J406	E04365-006	F.W. Socket	
	J407	E04365-003	F.W. Socket	
	J408	E04365-005	F.W. Socket	

△ : Safety Parts

3-(5) TPS-317 □ Fuse P. C. Board Ass'y

- TPS-317 □ Fuse P.C. Board Ass'y
(for Europe, West Germany, Australia and U.K. only)

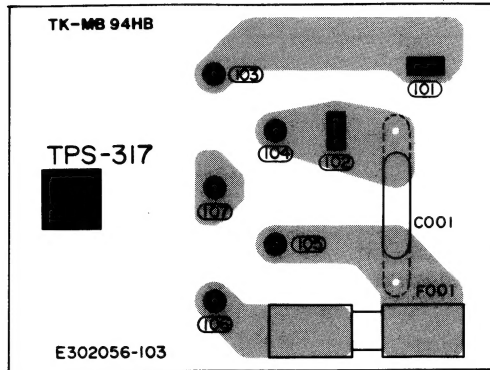


Fig. 9

Designated Areas	P.C. Board Ass'y
Europe, Australia West Germany	TPS-317 L
U. K.	TPS-317 MBS

Capacitors

Item No.	Part Number	Description	Areas
△ C001	QFZ9020-103	M. Mylar	L
△ C001	QFZ9020-103BS	M. Mylar	MBS

Others

Item No.	Part Number	Description	Areas
	E302056-103	Circuit Board	L
	E302056-103BS	Circuit Board	BS
	E43727-002	Tab	L MBS
	E65508-001	Tab	L MBS
	EMG7331-001	Fuse Clip	L MBS

△ : Safety Parts

- TPS-317A Fuse P.C. Board Ass'y
(for U.S. Military Market & Other Countries only)

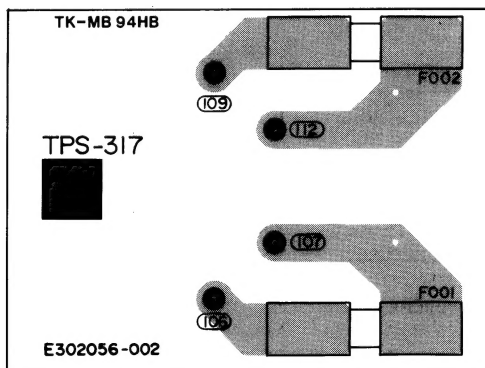


Fig. 10

Others

Item No.	Part Number	Description	Areas
	E302056-002	Circuit Board	
	E43727-002	Tab	
	E65508-001	Tab	
	EMG7331-001	Fuse Clip	

△ : Safety Parts

3-(6) TPS-225 H AC Outlet P. C. Board Ass'y

■ for U. S. A. & Canada

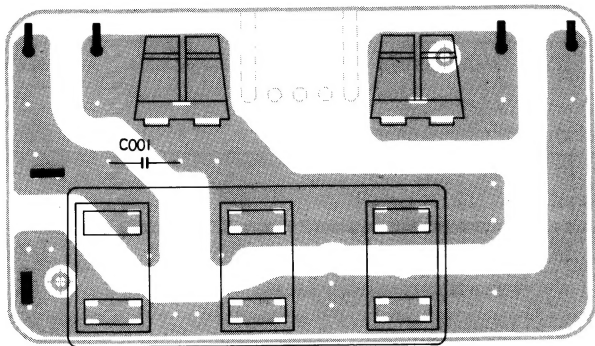


Fig. 11

Capacitor

△	Item No.	Part Number	Description	<input type="checkbox"/>
△	C001	QCZ9014-103	Ceramic	

Others

△	Item No.	Part Number	Description	<input type="checkbox"/>
		E66003-005	Circuit Board	
		E03675-004	Fuse Clip	
		E43727-001	Tab	
		E65508-001	Tab	
△		QMC0637-004	3P AC Socket	

△: Safety Parts

3-(7) TPS-318 A Voltage Selector P. C. Board Ass'y

■ for Other Countries

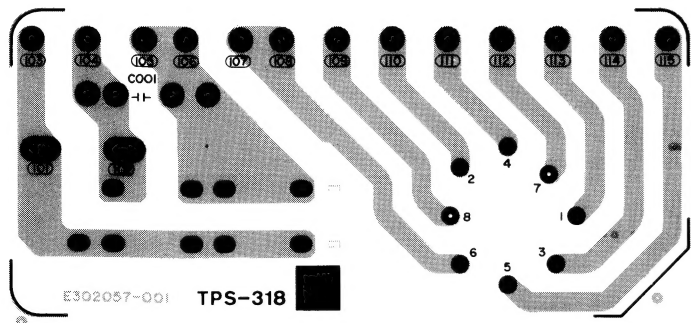


Fig. 12

Capacitor

△	Item No.	Part Number	Description	<input type="checkbox"/>
△	C001	QFH53BM-103M	M. Mylar 0.01	

Others

△	Item No.	Part Number	Description	<input type="checkbox"/>
		E302057-001	Circuit Board	
		E43727-001	Tab	
		E65508-001	Tab	
△		QMC0637-004	3P AC Outlet	
△		QSR0085-006U	Voltage Selector	

△: Safety Parts

4. Packing Materials and Part Numbers

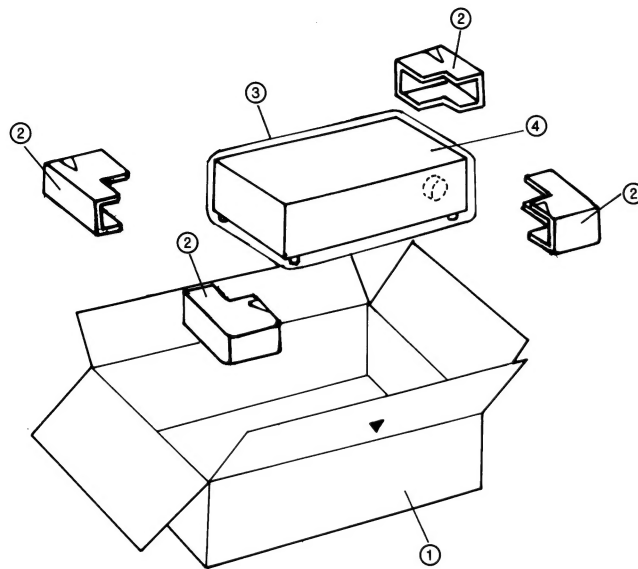


Fig. 13

The Marks for Designated Area

J.....	U. S. A.	P, PG..	U. S. Military Market
C.....	Canada	BS.....	U. K.
E.....	Europe	A.....	Australia
G.....	West Germany	U.....	Other Countries

No.	Part Number	Part Name	Q'ty	Description	Area
1	PK-AX500VBE	Packing Case	1	E300382-441	J, C, U, P, PG, E, G, A BS
2	NZ-AX500VBE	Fillers	1	E24600-010 E24600-011	
3	E34033-015	Envelope	1		
4	E34033-015B	Envelope	1		
	E36997-025	Protect Sheet	1		
5	E35246-001	Serial Label	2		J, C, U, P, PG, A, BS
	E35246-004	Serial Label	2		E
	E35246-006	Serial Label	2		G
	E35497-019	Caution Sheet	1	220V	PG, U
	E35497-017	Caution Sheet	1	110V	P

5. Accessories List

Part Name	Part Number	Area
Siemens Plug	E04056	U
Instruction Book	E30580-1180A	J, C, U P, PG, E, G, A
Instruction Book	E30580-1180ABS	BS
Envelope (for Instruction Book)	E41202-2	J, C, U, P, PG, E, G, A
Envelope (for Instruction Book)	E41202-2B	BS
JVC Safety Instruction Sheet	BT20044D	J
Envelope (for Warranty Card)	E66416-003	J
Service Center List	BT20071	C
Warranty Card	BT20048A	J, PG
Warranty Card	BT20025H	C
Warranty Card	BT20064	G
Warranty Card	BT20029C	A
Warranty Card	BT20060	BS
JVC Service Information Card	BT20046B	J, P, PG
EEC Agency	BT20066	G, BS
FTZ. Information	BT20054-006A	G

The Marks for Designated Areas			
J.....	U. S. A.	A.....	Australia
C.....	Canada	P, PG.....	U. S. Military Market
E.....	Europe	BS.....	U. K.
G.....	West Germany	U.....	Other Countries